THE TIMES
Higher Education
SUPPLEMENT

'Unpalatable' facts revealed about poly courses

from page 1

degree at Thames (nine students in 1974).

An analysis of national student recruitment in the 30 polytechnics shows large variations between different institutions and an over-provision of courses in many science and technology subjects. Among the most dramatic examples of the latter in 1974 were chemical engineering, polymer science and technology, chemistry, mathematics, computer science, physics, material sciences and nautical studies.

Some languages and engineering courses appear to have had a history of bad recruitment. Figures for 1975 show an improvement in engineering recruitment on most courses.

Degrees in polymer science and technology at Manchester and North London attracted nine and seven students respectively.

The entire 1974 recruitment to nautical studies degrees of 32 students is divided between five courses at four polytechnics. It ranged from nil at Sunderland, two and five at the City of London and 12 and 13 at Plymouth and Liverpool. This year, apart from the collapse of recruitment at the City of London, admissions have improved.

Recruitment to chemical engineering divides 71 students between four polytechnics: North East London (12); Glamorgan (17) and Teesside and South Bank (21 each).

One third of the entire recruitment to polytechnic mathematics degrees in Britain is admitted to one institution, Teesside (61 students) while the remaining 132 students are divided between 10 other degree courses with only Portsmouth recruiting more than 20 students.

Nearly one third of all computer science undergraduates are recruited to two polytechnics, Hatfield and Portsmouth, with a further third at another three: North Staffs at Brighton and Sheffield. A further eight polytechnics share the remaining third of the students with the lowest figures at Leeds (14), Glamorgan (15), Kingston (16) and Thames and City of Leicester (17).

Taken over a five year period the number of computer science courses has doubled, halving admissions to most of the successful courses. Manchester Polytechnic with the only full-time course, recruited only 12 students in 1974.

Recruitment to physics courses is uniformly low with seven polytechnics sharing a national total of 79 recruits. Newcastle, which has a physical electronics degree, attracts 19, while South Bank and Sunderland have eight and nine respectively.

Several institutions each run degree courses which, although unique, have a consistent record of low recruitment. They include ceramics at North Staffs: six, eight and eleven students between 1973 and 1975; information science at Leeds: 14 students in 1973 and 16 in 1974; computer systems engineering at Manchester: 19, 10 and 18 students over the past three years; and food science at South Bank: 12 and 18 students in the past two years.

One of the more hopeful differences between the 1974 and 1975 figures has been the improvement in admissions to electrical, mechanical and production engineering courses.

The 1974 figures showed large numbers of engineering courses failing to admit more than 20 students. This year's figures seem to suggest that engineering recruitment may have doubled in many places, although it is still falling far short of a healthy entry of about 50 students per course.

The most successful courses appeared to have been the combined social sciences, arts and humanities degrees, including subjects like accountancy, librarianship, law and estate management.

Among the highest recruiters are the multi-disciplinary degree at the City of London (221), combined studies at Middlesex (155), social studies at Liverpool (124), social science at Central London (118).

Reaction to the figures was swift this week. Sir Alex Smith, chairman of the Committee of Directors of Polytechnics, called for a national body to manage higher education with the introduction of some rationalization of courses between institutions.

He said the figures showed how inefficient the whole of the higher education system was, with approvals for new courses taking place against a background of overprovision in many areas.

Dr J. Frank Dickenson, director of North Staffordshire Polytechnic, said: "This is the unpalatable truth which was bound to come out at some stage. If we do not put our own house in order, it is certain that someone else will".

General Vacancies continued

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Recruitment in some degree courses, October 1974

Computer Science

	Sandwich degrees 1st year	Total
Brighton	28 (22)	87 (98)
Hatfield	45 (46)	139 (143)
Kingston	16 (27)	81 (116)
Thames	17 (—)	17 (—)
Leicester	17 (16)	79 (98)
Portsmouth	46 (33)	130 (118)
Lanchester	24 (30)	84 (71)
North Staffs	28 (58)	133 (259)
Wolverhampton	18 (28)	61 (75)
Leeds	14 (15)	56 (61)
Sheffield	27 (25)	68 (45)
Glamorgan	15 (12)	43 (27)

Figures in brackets 1973, other figures 1974.
— = unable to recruit.

Mathematics and statistics (including statistics and computing; mathematics and computing)

	Sandwich degrees 1st year	Total
Hatfield	18 (25)	69 (77)
Middlesex	14 (13)	44 (52)
South Bank	18 (17)	42 (34)
Thames	16 (20)	71 (84)
Leicester	16 (16)	47 (57)
Newcastle	— (—)	24 (38)
Teesside (mathematical science)	61 (40)	227 (16)
Portsmouth	21 (12)	48 (49)
Lanchester	* (14)	25 (41)
North Staffs	— (11)	— (20)
Sheffield, (applied statistics)	17 (—)	17 (—)
Glamorgan	12 (13)	37 (43)

Figures in brackets 1973, other figures 1974.
* = course closed.
— = unable to recruit.

Materials science

	Sandwich
City of London	— (—) 15 (10)
Thames	8 (—) 15 (6)
Sunderland	— (13) 28 (42)
Lanchester	21 (22) 41 (54)
Sheffield	21 (13) 69 (71)

Physics

	Sandwich 1st year	Total
North London	13 (17)	39 (69)
South Bank	8 (14)	40 (43)
Newcastle	15 (26)	104 (111)
Sunderland	9 (6)	26 (32)
Liverpool	15 (17)	51 (58)
Portsmouth	15 (13)	46 (43)
Lanchester	* (10)	16 (30)

Combined studies science

	Full-time 1st year	Total
Brighton	34 (32)	78 (73)
Central London	80 (92)	270 (157)
NE London	86 (—)	86 (—)
North London	110 (—)	287 (176)
Cambridgeshire	41 (—)	41 (—)
Luton	28 (29)	46 (28)
City of Leicester	42 (58)	83 (105)
Sunderland	78 (67)	160 (132)
Manchester	41 (28)	92 (61)
Oxford	72 (72)	138 (73)
Portsmouth	101 (—)	101 (—)
Lanchester	* (125)	152 (139)

Social studies

	Full-time	
Central London	118 (—)	118 (—)
High Wycombe	26 (30)	52 (30)
Kingston	54 (36)	116 (136)
Kingston	61 (40)	114 (93)
North London	51 (51)	136 (136)
South Bank	73 (61)	170 (179)
Newcastle	77 (68)	167 (151)
Sunderland	17 (—)	17 (—)
Teesside	99 (65)	185 (145)
Liverpool	124 (72)	176 (72)
Manchester	79 (44)	179 (165)
Oxford	44 (50)	127 (93)
Portsmouth	25 (26)	78 (63)
Bristol	78 (—)	78 (—)
Lanchester	82 (93)	237 (230)
Huddersfield	20 (—)	20 (—)
Leeds	32 (—)	32 (—)
Sheffield	48 (—)	48 (—)

All figures are for 1974; 1973 figures in brackets.

Recruitment to two polytechnics

HUDDERSFIELD

Subject	1973	1974	1975
Business studies*	30	39	44
Engineering systems and control	12	17	12
Textile marketing (BA)	22	20	26
Applied chemistry	21	15	17
Behavioural studies*	—	28	24
Humanities	65	99	116
Catering studies	16	16	18
Music	19	30	26
Mechanical engineering	16	20	22
Human ecology	—	—	30
Marketing engineering	—	21	22
B Ed (combined studies)	—	—	20

* entry restricted by DES.

SOUTH BANK

Subject	1973	1974	1975
Nursing*	22	22	22
Chemical Engineering	18	12	12
Building	17	16	16
Mathematics	—	12	12
Food Science	10	8	8
Chemistry	14	8	8
Physics	—	8	8
Law*	25	37	37
Town Planning*	23	37	37
Electrical Engineering	22	37	37
Structural Engineering	—	—	37

* courses admission limited

This example shows how degree engineering have increased their recruitment this year while subjects like physics and chemistry have declined.

The degree recruitment to Huddersfield and South Bank illustrated above is a microcosm of the problem facing the polytechnics. It shows how courses like chiropody and control engineering have consistently failed to attract many students while courses launched in the humanities and business studies have remained strong or grown at fast rates.

It also shows how specialist courses like ceramics, textiles, which by nature [illegible] Huddersfield, are operating [illegible] to attract students over a period in spite of claims that these courses are irrelevant.

Multiply this examination by 30 and the result is a national situation where 100 degree courses fail to attract 25 or more students.

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Stiff reprimand for Mr Miller

by Frances Gibb

Mr Terence Miller is to keep his post as director of the Polytechnic of North London but was warned to stay out of trouble after the Court of Governors voted this week by 17 to 5 to adopt the report of the committee set up to find ways of exercising more control over the director.

The report does not recommend Mr Miller's dismissal but warns: "Any future ill-considered correspondence on his part would be regarded as a serious matter, not least because it would reveal a significant lack of discretion on the part of one whose job essentially requires discretion."

While it recognizes that there is no measure which can ensure discreet behaviour the committee says: "Further indiscretions may be prevented by the court's formally drawing the attention of the director to this report."

The differences at the polytechnic were some excuse for an "isolated lapse and error of judgment," the report says. "Less excusable is a repeated lapse or error."

Students, about 100 of whom picketed the governors' meeting, abandoned plans for an immediate occupation of the polytechnic buildings after a poorly attended union meeting this week. But future direct action has not been ruled out.

The five man committee under Judge Eric Stockdale was set up in June after the governors had voted by 16 to nine to suspend Mr Miller for "grossly improper" behaviour.

Mr Miller had written to the Secretary of State for Education recommending further cuts in the level of student representation on the polytechnic's academic board. The level had already been agreed both by the court of governors and the joint polytechnic/Inner London Education Authority advisory committee, on both of which Mr Miller was a member.

Dr Walter Ross, then chairman of the governors, did not consider Mr Miller's action warranted suspension under the terms outlined for such cases in the polytechnic's articles of government, and instead set up the committee.

Referring to the director's withdrawal of his letter, after the strong reaction it provoked, the report notes that he "failed to expect such a reaction or such criticism". It was a similar lack of foresight which led him to make "the ill-considered statements" about staff and students reported in the press in June, it says.

Throughout its inquiry, the committee was conscious of the director's rights of free speech and freedom to write articles and letters. The court has no right to gag him. "But acceptance of any post implies an agreement to act responsibly when making speeches and when writing articles and letters which relate to that post", it says.

Mr Miller has been taken to task for a similar action two years ago.

He was not available for comment this week.

Ministerial meddling in SSRC claimed

by David Walker
Social Sciences Correspondent

The Social Science Research Council needs protection from the encroachments of Government Ministers, one of its former chairmen says in an article published today.

Mr Andrew Shonfield, director of Chatham House and chairman of the SSRC from 1968-71, says that his experience at the hands of Mrs Thatcher, then Secretary for Education, and Sir Keith Joseph, then Secretary for Social Services, had taught him the need for "an effective safeguard" against political interference.

"I am not saying the SSRC was plagued with political appointments but there was a tendency for each minister to be his own, or her own social scientist—whereas neither he nor she would presume to express their personal intellectual predilections in the choice of physicists or medical researchers."

Mr Shonfield suggests that appointments to the SSRC should be made only on the proposal of the chairman, whereas at present the minister has, in theory, absolute freedom to choose. He says that Mrs Thatcher "a ferocious addict of the free market" took over the Department of Education with very definite views about the kind of economists she liked and did not like.

He adds that any chairman of the SSRC who mentioned the words "incomes policy" to her at that stage put his reputation at risk.

SSRC Newsletter, November 1975.

Poly directors urge commission

Proposals for a national commission on higher education which would determine the requirements of the different types of education and allocate resources, were made this week by the Committee of Directors of Polytechnics.

The committee, commenting on the new regional machinery suggested by the Council for Local Education Authorities, claimed that the way the whole system of higher and further education was now organized was inherently inefficient.

It resulted in a wasteful duplication of 500 many courses in too many institutions.

Full document, pages 4 and 27
James Forster, page 9
Leader, page 14

Low recruitment to technician courses 'threatens industry'

by David Hencke

Almost half the 360 Higher National Diploma courses in England and Wales were unable to attract 20 students in October 1974, according to confidential figures prepared by colleges and polytechnics for the Department of Education and Science.

At least 29 HND courses either failed to run or were closed by regional inspectors, and another 31 could not recruit 10 students. The remaining 120 courses failed to reach admissions of 20.

Taken with the recruitment to degree courses published in *The THES* last week, the figures show that more than 250 of 1,060 courses provided at polytechnics and colleges of technology, with an admissions requirement of one A level or more, were recruiting below 20 students.

If empty places in universities are added to this total some picture of the dearth of suitably qualified science undergraduates and skilled technicians needed for British industry can be ascertained.

Sir Alex Smith, chairman of the Committee of Directors of Polytechnics, commenting specifically on the HND figures published this week, said: "I am very concerned about the shortage of skilled technicians. If this level of recruitment is continued these courses face almost certain death in the next decade, with serious consequences for British industry."

An analysis of the low recruitment to HND courses shows a similar pattern to degree recruitment. Figures are low for science and technology and high in the fields of business studies, hotel and catering and agriculture.

Total recruitment marginally increased between 1973 and 1974. First year admissions to full-time courses increased from 3,502 to 3,701 and to sandwich courses from 4,853 to 4,981.

The number of students enrolled on HND courses fell from 19,165 to 18,953 on sandwich courses and increased from 8,365 to 8,592 on full-time courses.

Courses that failed to run included four in civil engineering, five in chemical engineering, four in mechanical engineering, four in electrical engineering, two in physics, one in metallurgy, three in chemistry, four in mathematics, and one each in computer studies, business studies, institutional management, and business studies and languages.

Polytechnics unable to recruit students to some of their HND courses were Teesside, Huddersfield, North East London, Wolverhampton, North Staffordshire, and South Bank.

Among the colleges of technology which failed to recruit were Wrexham, which has become part of the North East Wales Institute of Higher Education, and Mid-Essex Technical College and North-East Essex Technical College, both due to be absorbed into colleges of higher education.

Production engineering was one of the lowest areas of recruitment. Figures returned to the DES before November 1 last year showed that Lanchester Polytechnic had recruited one student, Birmingham Polytechnic four, and Hatfield Polytechnic six.

The largest recruitment was to three colleges, Accrington College of Further Education (20) and Wilsden and Salford Colleges of Technology (19 each).

Since, however, sandwich courses often do not start until January

continued on page 28

Universities cheered by applications

Applications for university places for 1976 will be up to 10 per cent higher than this year, with medicine, some branches of applied science, law, economics, accountancy and English attracting significantly more sixth formers.

The Universities Central Council on Admissions has processed nearly 20 per cent more applications than this time last year, a slightly false comparison because of a staff overtime ban at UCCA last year which slowed the process up. Applications close on December 15 but most universities have seen about half their expected total already.

University admissions officers are very pleased with the provisional figures. Mr Ted Nuttall of Sussex University said an increase of about 5 per cent over last year was to be expected. He suggested that changes in the size of the population in general and the lack of employment opportunities for sixth formers could explain part of the rise, but warned that a shift in the timing of university applications could distort the picture.

One admissions officer said he would be very surprised if there were any university that did not get last year's admissions total.

In most universities applications are up in a range of subjects from English and history on the arts side to mechanical engineering and even chemistry on the science. Subjects which seem to be attracting fewer students than last year include modern languages, particularly French, German and Russian.

However there are indications that applications in one of the most sought after areas, medicine, are flattening off and the increase in this area has not been as high as expected. Though in some universities—such as Leicester—applications to study medicine could be up to 20 per cent more than in 1975, elsewhere, as at Leeds, they could be only a few per cent higher.

Arts admissions are complicated by the fact that while English keeps its popularity modern languages are declining, with exceptions such as French at Surrey University, which reports "amazing numbers" of applicants.

In the social sciences early indications are that the popularity of law may be falling off slightly while economics and accountancy are likely to attract up to a quarter more applicants than last year.

Other subjects where applications are likely to be up include mechanical engineering, agriculture and geography.

800 student communists

The British Communist Party has reported a student membership of more than 800 with branches in 62 universities and colleges.

At the thirty-fourth annual party congress in London this week the national student committee said it had an active year, attracting nearly 650 people to its Communist University held in London in the summer.



PICTURE COPYRIGHT GEORGE RODGER

Contents

Social anthropology
Edward Moody, R. L. Stirrat and Ann Oakley are among the contributors to five pages of anthropological reviews, pages 19-23

T. S. Eliot
Denis Donoghue reviews *Eliot* by Stephen Spender and a new edition of Eliot's prose edited by Frank Kermode, page 16

Tortured in Chile
A seminar on education in Chile last week heard accounts of life under the Junta. Jane Feinmann reports, page 9

Sir Arthur Vick
David Walker profiles the retiring vice-chancellor of Queen's, Belfast, page 7

Paul Johnson
More replies, from Bernard Williams, Martin Jacques and John Holloway, page 11

Arts and skills
Patrick Nuttgens argues that there is an imbalance between academic disciplines and skills in our education and suggests a remedy, page 15



Our man in Washington

As part of the continuing development of weekly page of news from the United the overseas service in *The THES* States and Canada.
Michael Binyon has been appointed the One of the original members of *The* paper's full-time correspondent in North *THES* staff when the paper first appeared America, where circulation now stands at in 1971 Michael Binyon has most recently more than 1,000. worked on *The Times* Foreign Desk.

He will be based in the offices of *The* where his assignments have included the *Times* in Washington and will file a Middle East and Portugal.

Diary	5
Letters	3, 14
OU programmes	10
Noticeboard	10
Overseas news	12, 13
Books	18-26
Classified index	24

'Symbolic' move south for Chelsea College

The move by Chelsea College to a central site at Wandsworth will be a significant symbolic step for London University, Lord Wolfenden, principal of the college, has predicted.

Speaking at a ceremony to mark the laying, by Queen Elizabeth the Queen Mother, of the foundation stone at the first hall of residence at Wandsworth, Lord Wolfenden said he expected links with other London University colleges and Senate House to remain as strong as ever.

The move stems from the 1968 Todd Report on Medical Education when it was suggested that the college should forge a link with St George's Hospital Medical School and the Royal Dental Hospital School of Dental Surgery, both in the process of redeveloping at Tooting.

The hall of residence, due to be completed in 1977, will be the first building on the site and will be followed by a science education centre. Other departments of Chelsea College, at present spread over a wide area of London, will move south of the Thames when accommodation is built.

Lord Wolfenden said it would be the first time a "multi-faculty" presence had been manifested in south-west London but the college did not intend to become an ivory tower or isolationist in its outlook.

He paid tribute to Sir Malcolm Gavin, former principal of Chelsea College, after whom the hall is named. Dr Gavin, said Lord Wolfenden, had devoted himself to the advancement of Chelsea College within London University and had been deeply involved in the planning for the tripartite academic enterprise.

Lord Wolfenden said an anonymous donor had enabled the college to obtain the new site.

Next week the Queen Mother celebrates her twentieth year as Chancellor of London University.



The Queen Mother lays the foundation stone at Malcolm Gavin Hall.

Three solutions for post school administration proposed

by Sue Reid

Regional executive 'government could take responsibility for administering advanced further education, higher education and initial and in-service teacher training in the future, Mr Dudley Fiske, chief education officer of Manchester, has suggested.

Giving a public lecture in Manchester this week Mr Fiske said many people did not believe that 104 separate local education authorities could permanently retain responsibility for the 100 institutions of higher education now being shaped on the public side of the "binary" curtain".

The 1944 Education Act, he said, had created an excellent structure for all the truly local services such as nursery, primary and secondary schools, and local technical colleges, but it had never been the ideal vehicle for further and higher education.

Higher education remained within local government because the Government had rejected the views of Sir Robbins Committee, which in 1963 proposed the transfer of teacher training to the universities.

During the lecture, named "Education—the cuckoo in the local government nest", Mr Fiske suggested two other possible solutions to the problems facing education administration.

There was the possibility of *ad hoc* bodies, on the lines of the new health authorities which would survive the debate of 75 years and that led to the abolition of separate school boards. At that time it had been argued that this course could lead to extravagancies, said Mr Fiske. However, he added, this particular argument was now weakened by the long list of other services no longer within local government.

Certainly the education service was big enough to go it alone and if loss of representational democracy was feared it would be possible to hold separate elections.

As a third alternative Mr Fiske suggested the wholesale transfer (or more) of the education service to a national level. The creation of a new national education board, or even two separate boards, one for higher education and one for schools, was a theoretical possibility, although the rights of the citizen against centralized bureaucracy would need to be protected.

Mr Fiske believed that such a change would be undesirable and even perhaps unworkable, although it had to be recognized that many people might not mind unduly if such a system were able to include effective community involvement in the running of individual schools. Even so, he said, the prospect of managing the affairs of 30,000 institutions from Whitehall was certainly daunting and contrary to other current trends.

Of the three possible futures the *ad hoc* solution looked the strongest runner, with a regional solution dependent on the wider emerging pattern of devolution.

Leader, page 14

No pay for student representatives as money crisis bites

by Peter Wilby

The full-time officers of Cambridge Students' Union have lost their salaries as a result of a financial crisis.

The sabbatical president, Mr Alastair Begg, has resigned and left Cambridge. He finished his degree course last year. The other sabbatical officer, deputy president Pippa Berry, of King's College, says she hopes to carry on for the time being.

The union has a £2,200 deficit, most of it carried over from last year. The university refused to release a promised £500 towards office expenses (though it continued paying the union's secretarial salaries, worth £2,800) until the deficit was written off.

At a meeting last week, the union executive decided to bring its books into balance by cutting office expenses by 10 per cent, scrapping a late-night mini-bus service to outlying colleges and stopping annual salaries of £1,150 paid to each of the full-time officers.

CSU depends largely on affiliation fees of 75 per cent per student from college Junior Common Rooms. This year, four JCRs have disaffiliated, but one of them is reconsidering its decision.

During the next week, some JCRs have sent special donations to help the union out of its crisis.

Elections for a new president, who will be part-time, will be held on 28 November.

DES threat to college 'lame duck' departments

by David Hencke

Departments in many colleges of education could be closed under new proposals for a further rationalization of teacher training planned by the Department of Education and Science.

A draft circular is being prepared by senior DES officials to devolve powers to nine of the ten Regional Advisory Councils to reduce the number of course options available in bachelor of education degrees.

The scheme has been thought necessary because there is a danger that unpopular subjects will be phased out by many colleges when faced with reductions of between 30 and 66 per cent in teacher training places.

It is understood that officials have belatedly realized that subjects like mathematics, science, music and religious education, where there is still a serious teacher shortage, could be seriously at risk when colleges could easily fill their places with good recruiting subjects.

Under the draft DES proposals, still under discussion, RACs will be empowered to convene meetings to discuss the problem and put forward proposals on courses for their area.

They will, therefore, be taking over the defunct role of the former area training organizations, based in the universities.

The result of such course rationalization would mean the closure of some college departments, since course options would be concentrated in one or two colleges in the area. It is hoped that science and mathematics departments could then be concentrated at selected colleges with viable numbers rather than scattered in seven or eight colleges with four or five students in each subject.

The tone of the circular shows that the DES is concerned that the colleges, which will be in competition outside teacher training with polytechnics and universities, may not be able to attract viable numbers for many courses.

The DES is proposing to reorganize the colleges in East Anglia, since only small numbers are involved and the RAC is one of the smallest in the country.

NUS promises positive action on housing and welfare

by Jane Headley

The National Union of Students will be taking much more positive action in future to combat the crisis in student accommodation and to step up its welfare campaign. But students' unions must be prepared to play their part at a local level.

This was the overall message from NUS conferences on housing and welfare held at the University of Aston in Birmingham last week.

Addressing 150 delegates at the housing conference, Charles Clarke, the NUS president, said: "My experience of the NUS housing campaign in the past has been that at the start of the academic year we put out press releases and posters but very little new is said.

"We have now gone on beyond the poster and press campaign. This is the first time the NUS has held a conference of this nature and we are taking our first steps towards positive action."

Mr Clarke went on to outline ways in which students could take action to combat the shortage in housing not only for students, but for everyone.

They must be prepared to undertake basic research on housing in their areas, he said, finding out such things as the local authority policy on housing, the number of empty properties, the kind of property being built, and the cost for families or for single people, the demand for accommodation and so on.

The needs of students must form part of the needs of the community as a whole, Mr Clarke added. But at the same time, he pointed out, the residential accommodation became the responsibility of local authorities so students had the same rights as other tenants—such as security of tenure and rent allowances. "At the end of the day, we must accept that halls of residence should not be reserved specifically for student use."

Mr Clarke also urged that students' unions cooperate with other organizations in the locality such as housing associations, squatting organizations, youth clubs and trade union youth movements.

Addressing the welfare conference, Jez Lloyd, vice-president (welfare) of the NUS, also called for more action on a local level. He stressed the usefulness of area welfare conferences, not only because problems differed greatly from locality to locality, but also because of the feedback they could provide to NUS headquarters.

Students were probably now facing far greater problems than ever before as far as grants, housing, social security, health and job prospects were concerned, Mr Lloyd said. This meant that welfare officers not only had to deal with the "nuts and bolts problems" experienced by students but also actively participate in the welfare campaign to tackle the inadequacies of the social system often creating the problems.

"There is an artificial separation between welfare work and campaigning in terms of tackling students' problems", he said. "People working in welfare are at the coalface of campaigning and must be prepared to face up to local authorities, the DHSS and so on."

It was important too, Mr Lloyd said, for students' unions to set up area welfare networks. In this way smaller or poorer unions could benefit from the facilities of larger and better equipped unions.

'Scots control for universities'

The control of the Scottish universities should lie with the Scottish Assembly when it is set up, the Scottish Council of the National Union of Students voted at the weekend. To exclude them would perpetuate the binary system in Scotland higher education and its present "anomalous structure and policy".

The devolution question would be one of the most important to be tackled by NUS Scotland in the coming year, Mr John Reid, vice-chairman, told the meeting in Edinburgh. Its importance for education lay in the opportunity it provided to reappraise the whole post-school sector in Scotland.

Mr Stewart McIntosh, chairman of NUS Scotland, urged closer liaison between student organizations and local trade unions and trade councils, particularly in the fight against cuts in education. He said they now had very good links with the Scottish TUC, the National Union of Public Employees and the Educational Institute of Scotland, all of whom were represented at the conference.

Mr McIntosh claimed that a further £130m would be slashed from higher education alone. Along with other proposed cuts, the effect would be to starve the education system to death. The public services were being put into a state of suspended animation. Mass action by students next term was "very likely" if these proposals were implemented.

Strathclyde students moved a successful motion which demanded the reversal of all cutbacks in educational spending and more effective campaigning at a national level. It also called for grant increases, the abolition of the parental contribution, an end to all forms of discrimination in the distribution of grants and an end to discretionary awards.

The NUS Scottish executive persuaded the conference that it should investigate the withdrawal of all union services from Glasgow University, the only one in Scotland not affiliated to NUS.

The executive believed that where students "exercise their freedom not to join the National Union" they should not benefit from the services and internal events of the union. An amendment to the executive's motion from Robert Gordon's Institute of Technology, that all colleges within NUS break off reciprocal agreement with Glasgow University, was rejected.

'Change girls-will-be-girls line at A level'

by Frances Gibb

A-level courses should allow pupils going on to higher education a selection of subjects which cross the traditional sex-role boundaries, the National Committee of Working Women's Organizations recommended this week.

Early specialization for boys and girls entering higher education must be deplored, the committee said. Girls missed opportunities in science, and boys missed them in language. This was more the case in single-sex than in mixed schools.

The committee's recommendations were contained in a document which commented on the Government report, *Curriculum Differences for Boys and Girls*, published in April.

Summarizing the report, the committee said: "The range of courses offered to boys is greater than that offered girls, who are especially at a disadvantage in single-sex schools in sixth form economics as well as science and geography."

For girls taking one science, the choice was invariably biology which by itself had limited value as a qualification for continued education. For the quality of a science course thus excluded biology was open to serious question.

Other recommendations were that there should be legislation for statutory day release for all up to the age of 18. "Day release is not encouraged by employers in employment where women predominate. Furthermore, young women do not always take such opportunities as exist."

The possibility of educational credits for later use for day release not taken up between the age of 18 and 18 should be investigated, the committee suggested.

Few women applied for craft and technician courses, partly as a result of poor instruction in mathematics, technical drawing and craft subjects at school. Colleges of further education should be encouraged to provide "catching up" courses to enable women students to specialize with such subjects before attending a full course.

THE TIMES HIGHER EDUCATION SUPPLEMENT 21.11.75 3

Boyle warns of danger in exceeding targets

by David Walker



Lord Boyle

Applications to Leeds University were so buoyant, there was a "real danger" of overshooting the target laid down by the University Grants Committee, its vice-chancellor, Lord Boyle, said yesterday.

He told the university court that the outlook for the year was much less critical than had been feared. Undergraduate numbers were almost 20 per cent up on 1974. The university was in the black with an accumulated reserve of nearly £500,000 in July, 1975.

The total number of undergraduates in the university this year was 7,426 compared with 7,065 in 1974 and the target set by the UGC for 1976-77 of 7,500 to 7,800 students. The bulk of the growth in student numbers was in the arts faculties and Lord Boyle suggested a move away from the UGC norms of 40 per cent arts-based to 60 per cent science-based students.

Lord Boyle warned that it would be dangerous for the university either to overshoot or seriously to miss the UGC target. To exceed it would mean the university would have students not paid for through the block grant. To miss it would rob Leeds of any supplementary sums allocated by the UGC.

He recommended to the university a definition of planning, acquired when serving as a Treasury minister, which saw it as the art of handling short-term fluctuations in such a way that they did not result in long term weaknesses.

Despite a predicted £1m deficit by the end of the year 1974-75 the university had made sufficient economies to bring the deficit down to less than £300,000 which was then deducted from reserves.

They had been left with £500,000 in reserve, when they had expected their reserves to be wiped out completely. Short-term financial management, lending money for small periods at high rates of interest, had brought in £90,000.

Lord Boyle said the Government's pay policy affected the university in two separate ways. It allowed the university to reduce its spending on pay considerably, but meant that academics were suffering from pressure on their salaries driving their position relative to other professionals downwards.

"University teachers, and those in 'academic equivalent' posts, do not want to breach the Government's pay policy which I for one have publicly supported. But its impact on the second part of their salary claim—the cost of living increase—has been to telescope completely the interval between the end of Stage 3 and the introduction of the new £6-a-week limit.

"This fact must not be lost sight of in any future negotiation, nor the verdict of the arbitration tribunal that there exists between the work at universities and that in further education 'differences which merit recognition' in salary terms."

On questions of manpower planning, Lord Boyle said he remained sceptical. For instance, the fact that university places were more easily gained in some subjects than others seemed to have a surprisingly feeble effect on students' choices, so that gross inequalities between subject in entry qualifications would be needed to force university entry into any mould considerably different from the shape of unfettered choices.

● Those who believe in the welfare of the country's education service "have got a duty to speak up, Lord Boyle told a public meeting in Leeds on Saturday.

Many opinions are moulded by television, Lord Boyle said. He called on people to monitor what is said on television about cuts in public expenditure and then to be prepared to seek time on the air to speak up when the education system is under attack.

Referring to local authority expenditure he said: "There are half a dozen broadcasts on the rates to every one about what the rates actually provide."

Saturday's meeting was held at Leeds Polytechnic under the slogan "Education in Danger". Organized by the Leeds Campaign Against Cuts in Education, a group formed 12 months ago by trade unionists working in schools and colleges in the city, it attracted an audience of over 200 largely composed of education lecturers and students.

They heard all of the three main speakers—Lord Boyle, Charles Clarke, president of the National Union of Students, and Bob Cryer, the Labour MP for Keighley—question the wisdom of the Government's policy of reducing public expenditure.

Lord Boyle said he was sceptical of the argument that cuts in public expenditure are the way out of our difficulties. "The Government is heading its own tail through repeated cuts in public spending."

Regarding education, he said that all the cuts that could be made painlessly had been made but he was sure that there were more on the way.

Staff stage cuts strike in Manchester

by Frances Gibb

Lecturers at Manchester Polytechnic staged a half-day strike this week in protest against plans to reduce the area's teacher training staff by 50 per cent. About 200 of them also lobbied a Manchester education committee meeting.

The committee is considering proposals that after the planned mergers between Manchester Polytechnic Didsbury and Hollings colleges of education, and between Gaskell, Manchester and Mother colleges of education, the present 435 teacher training staff be cut to between 195 and 210 by 1983.

Teacher training students in the area are also to be cut by about 50 per cent, by 1981 they will be reduced from the present figure of 3,890 to 1,950.

The first redeployment of staff will not take place until 1977 and all affected will be given one year's notice. In 1977, teacher training two-year courses for unemployed staff in the two merged institutions will be cut by 30, and in subsequent years by 50, 60, 55, 20 and then in 1982 by 10. Staff numbers in the two new institutions, which are expected to be formed by next September, would be roughly as present.

The committee estimates that the maximum of staff likely to retire before 1983 is about 50.

Mr Bob Askew, secretary of the polytechnic's branch of the Association of Teachers in Technical Institutions, which represents two-thirds of the polytechnic's teaching staff, said: "One is left in doubt as to what the other members of staff are going to do, if they do not go into schools or into other colleges."

Dr David Jones, further education officer of Manchester education authority, said: "The proposals are still being considered but we would hope that the education committee will keep its guarantee that there won't be any redundancy.

"We would envisage that all staff would be absorbed in other jobs. The authority has seven colleges of further education and a large number of schools. Also, some staff might be happy to retire."

Letters, page 14

New £1m computer at Bangor

Bangor University is to have a new £500,000 American DEC 1080 computer to replace the present ICL 4130. Bangor follows York, Leeds and Essex in choosing DEC machines.

Mr Brian Rudall of the university's computing laboratory said that several machines could have met their needs but the 1080 was the cheapest. The most urgent requirement was an expansion of "on line" capacity for research and teaching.

In future a total of 512 users will be able to communicate directly with the computer. The present limit is 24.

The DEC 1080 will be installed in August, 1976 and will be moved to a new £1m computer centre in October 1977. The system will be one of the largest in Wales.

AUT salary issue still in the air

Academics are no closer to getting their cost-of-living salary increase. The Department of Education and Science had not replied by Wednesday to requests from the Association of University Teachers for a further meeting.

DES officials have been in consultation with the Department of Employment over both the exact timing of the £312 cost-of-living payment being offered to university teachers and the wording of any explanation that might be given on future salary claims by the AUT.

Answering a question in Parliament from Dr Keith Hampson, MP, secretary of the Conservative Parliamentary Education Committee, Mr Mulley, Secretary of State for Education, said that university staff would not want the Government's counter-inflation policy to be broken especially for them.

In many local AUT branches what is seen as the Government's dilatoriness in settling has strengthened the demand for reform of university teachers' pay negotiating machinery. The regular winter meeting of the AUT council to be held next month in Swansea will discuss the abolition of the present two-tier system of negotiating first with the university authorities and then with the Government.

The AUT executive will recommend to the council that the machinery be reformed so that the AUT can get to the "point of decision" on salary claims without having to seek the permission of any other.

Mr Laurie Sapper, general secretary of the AUT, said: "Members want to time claims when they want and for how much they want. They want the freedom, too, to refer claims to arbitration if they wish."

If the proposed changes are passed by the council the AUT is bound to notify the Universities Authorities Panel and the DES and is likely to invite the Advisory, Conciliation and Arbitration Service to help the parties agree on a new negotiating system.

Letters, page 14

Computer centre protects its users at expense of growth

by Alan Cane
Science Correspondent

London University Computer Centre has protected its users over the past year at the expense of developing the service and any further cuts in the budget would mean shutting down one of its machines. The economies include postponing the purchase of a £20,000 multiplexer essential to the development of an interactive service and delay in the replacement of obsolete magnetic tape systems, due last year.

The centre's annual report, published this week, shows that it cost £880,000 to run last year against an estimate of £920,000. The Computer Board, which has responsibility for supporting the university computer services, provided only £830,000.

The report says: "With the realization of the massive power available at the centre, this underlines the fact that regional centres can operate at very low costs per capacity delivered and that they form the backbone of the nationwide university computer services."

It goes on: "Without their existence it is hard to imagine how university research that requires computing could continue without massive increases in financial support."

Mr Neil Spoonley, director of the London University centre, said this week he believed that the university centres—the others are in Manchester and Edinburgh—should provide a high-quality, low-cost service as a foundation for the programme of investment in other university centres.

"Without the existence of the regional centres", he said, "most universities would be overwhelmed by demands for computing facilities."

The Board of Management of the centre have undertaken a study of future demands for computing to support research and education in the universities and these have led to a proposal to increase the centre's capacity in 1978.

Mr Spoonley said that the pattern of usage had changed and was no longer so dominated by a few small groups. "Excluding higher energy physics, for which special provision has been made by the Science Research Council, less than ten per cent of the computing for research work supported by the research councils and the University Grants Committee is derived from outside the university computer centres."

In a foreword to the report, Professor M. W. Humphrey Davies of Queen Mary College, London, chairman of the management board wrote: "Substantial economies have been made without affecting the quality of the services. Without doubt, if more pruning is necessary in the future, there will be an increasing impact on the services and users will begin to feel the effects quite seriously".

Sussex may validate Brighton Poly degrees

by David Hencke

Sussex University was this week to consider validating two new three-year bachelor of arts degrees for Brighton Polytechnic.

Proposals for new BA degrees in British studies and a BA combined studies have been put before the colleges advisory board of the university. The degrees are believed to be the first external university degrees to be considered for a polytechnic institution for some time.

They are part of the proposed cooperation between Sussex University and Brighton Polytechnic which was emphasized by Lord Crowther-Hunt when he decided that Brighton College of Education should be merged with the polytechnic rather than the university.

One important feature of the proposals is that students who do well in their final examinations will be eligible for an honours classification. If the standard of students is as high as existing bachelor of education graduates at Brighton College of Education, about half will qualify for an honours award.

If the degree proposals are successful the possibility of students receiving honours degrees after three years at other colleges of higher education validated by Sussex University is likely.

Last year Sussex University approved three-year ordinary degrees in humanities and human movement for the new Eastbourne College of Higher Education, and humanities degrees for Bishop Otter College, Chichester.

'Students like living away from home'

A sample survey of students at Reading University has revealed that nearly three-quarters of them could reach the university nearest their home in less than an hour. Over 52 per cent lived less than 15 miles from it.

The survey, published this week, was conducted by Miss Jill Gardner, a final-year undergraduate in mathematics and statistics, together with Mr Derek Pike, her tutor.

Students were asked whether they would like to attend their neighbourhood's university. More than 60 per cent of the sample said they were unwilling to live at home. Nearly a third said that a desire to move away from home was in fact the main reason why they were not attending their nearest university. Another third said they could not follow their chosen course of study there.

Concluding their discussion of whether students should be encouraged to stay at home, the authors say that while it would ease the accommodation shortage, it would reduce freedom of choice to an undesirable extent.

Neighbourhood Universities: an investigation into their reality and feasibility. By Derek J. Pike and Jill M. Gardner. University of Reading. Price 75p.

Teachers unite on in-service delay

Teacher unions have united in their opposition to the delay in introducing induction and in-service courses and are asking for an urgent meeting with Mr Mulley, Secretary of State.

A Joint Working Party for the Promotion of Induction and In-service Education has been established and is seeking assurances that the 13,000 places earmarked for in-service and induction courses in the colleges of education will be taken up.

The eight unions and professional associations supporting the group are the Headmasters' Association, the Association of Teachers in Colleges and Departments of Education, the Association of Teachers in Technical Institutions, the National Association of Head Teachers, the National Association of Schoolmasters, the National Union of Teachers and the Universities Council for the Education of Teachers.



This is a still from **KOLBERG**, a German film made in 1945 at a time when the Third Reich was crumbling. Set in the Napoleonic period, the film deals with the necessity of civilian militias being formed to aid the military when the nation is embattled. The BFI Distribution Library's extensive collection of fiction films of the Third Reich – including Bismarck's Dismissal, Friedrich Schiller, Titanic, No Answer From PPI – provides excellent material for the exploration of the relationship between politics/history/aesthetics.

● Films from BFI Distribution Library, 42/3 Lower Marsh, London, SE1. ● Books and Periodicals from the BFI Book Library, 81 Dean Street, London, W1V 6AA. ● Advice on course construction from the BFI Educational Advisory Service, 82 Dean Street, London, W1.

Bristol v-c criticizes Lord Crowther-Hunt

by David Walker

Lord Crowther-Hunt, Minister for Higher Education, was "ill informed" in his remarks about the universities, Dr A. W. Morrison, vice-chancellor of Bristol University, told staff recently in his annual address. He asked why officials at the Department of Education had not briefed their minister better.

Dr Morrison took issue with Lord Crowther-Hunt on a number of points. He rejected the simple notions of "relevance" and "usefulness". Listing courses on some scale of "relevance" was a threadbare way of describing what universities did.

"You cannot say what a university does in the higher education field by looking at the disciplines it comprises. University teaching is much more than imparting a discipline; it is imparting an attitude to learning, an attitude to things in general. It is something which we in this country do well and which we do better than a good many other countries."

He said that at Bristol five out of seven faculties were broadly vocational and in one of the others, social sciences, there was a range of "relevant courses" such as economics and accountancy. The numbers of students on "irrelevant" courses like history, philosophy and classics were pitifully small, he said.

Nevertheless it was up to the universities to keep the politicians well informed about what they were doing. Parliamentarians were not very well informed about what universities did yet they carried an enormous amount of responsibility.

Dr Morrison said the abuse of the notion of "usefulness" was not confined to politicians. Social scientists came in for some criticism.

"It does seem to me that here the economists, or at least some of them, have done us all a very great disservice. By pretending that their subject had anything 'useful' to say about pain or death or love or hate by means of the total artifacts of 'health economics' or 'education economics' and 'cost-benefit analysis' they have misled the gullible and the busy into the most extraordinary and untenable views and even decisions."

Talking about Bristol University affairs, Dr Morrison said the burden of frozen academic posts had been carried by the medical and science faculties particularly, because of their high turnover of staff. In medicine the protection of posts carrying clinical responsibilities had shifted the vacancies to the pre-clinical and the veterinary departments.



"Crofter, Lewis" by Gus Wylie, one of the 150 photographs in the "Hebridean View Finder" exhibition at the Regent Street Gallery, Polytechnic of Central London, from November 21 to December 12. The photographs result from a year's work jointly sponsored by the Highlands and Islands Development Board and the polytechnic.

Welsh target figure down

The University College of Wales, Aberystwyth, has lowered its student population target for 1981 by 12 per cent to 3,500, Sir Goronwy Daniel, its principal, noted in his annual report for 1974/75.

"But this still implies an increase of 600 students, or over 20 per cent, in five years and will not be easy to achieve", he said.

Serious thought would have to be given to the best way of providing the necessary student housing and in particular to the provision of a student residential site. Not many more lodgings or flats could be found in the town.

He said that further growth was justified by the continued high demand for places. The application rate for Aberystwyth had held up well with an average of about eight applicants for an undergraduate place.

"Not all universities are able to maintain as we do entry requirements well above the minimum required for matriculation. We believe that this policy pays, and that by treating applicants as our policy attracts those who are impressed by good academic standards."

Overseas students were forming a higher proportion of the total student population, he noted. In the last four years, students' numbers had grown by 281, of which 82 were from Wales, 72 from other parts of Britain and 127 from overseas.

SSRC law fellowships

The Social Science Research Council is to establish three fellowships in socio-legal studies outside its own research unit in Oxford. The fellowships will be funded from next October.

'Extend aid for engineers'

Industrial sponsorship of student engineers should be extended if the comparative decline in enrolment to engineering degree courses is to be checked, the National Economic Development Office urged this week.

In a document, *Shortages of Qualified Engineers*, it says that employers, university careers officers and representatives of professional institutions regard the current comparative decline in the number of students taking engineering degree courses as very serious.

The NEDO suggests that short-term remedies will not solve the problem caused, it says, by low pay, low status of engineers in society, a poor image of industry and a bias against engineering in the schools.

The report suggests that employers should be more systematic in their demand for the categories of qualified engineers they need.

Government figures show that the percentage of students taking engineering or technology courses fell from 27.8 of all students in 1965 to 20.3 per cent in 1973.

Scottish lecturers unite

Scottish further education lecturers who are members of the Educational Institute of Scotland, the primary and secondary teachers' union, have decided to form an autonomous association.

They are likely to seek amalgamation with the Scottish Further Education Association, which represents about a third of Scotland's 4,500 further education lecturers.

The breakaway EIS group will keep its links with the main teachers' union and probably continue to use administrative and other services provided by the EIS.

CDP reply to suggested new regional machinery for controlling post-school education

CLEA proposals 'will not reduce inefficiency'

In the judgment of the Committee of Directors of Polytechnics, the way in which the whole system of higher and further education is organized means that it is inherently inefficient. In particular the wasteful duplication of the many courses in too many institutions so that ratepayers and taxpayers pay too much for a service that ought to be better than it is.

Any large enterprise needs clarity about its purpose, and the constituent parts of the enterprise in turn need clarity about their particular purpose in the context of the whole. In higher and further education we are clear about the purpose of the polytechnics, for it was defined in the White Paper of 1966 which initiated their development. We are not aware of any definition of comparable clarity of the purpose of any other group of institutions involved in higher and further education.

Furthermore, a large enterprise such as higher and further education for it is a very large enterprise needs clarity on how to achieve maximum value for money and needs incentives for good management. There is no management structure charged with that responsibility, nor is there in the local authority sector an adequate system for the assembly and analysis of information from which criteria can be adduced so that the total resources committed to higher education can be most effectively used.

In consequence, there now exists a provision of higher and further education in which the overall resources are used inefficiently. Too often now the priorities of the educational system are outlined to meet the needs of institutions and fulfilling the career aspirations of the educators rather than to meeting the needs of those being educated.

In the context of that assessment, the CDP is disappointed with the proposal by the Council of Local Education Authorities for regional machinery in England. The committee sees it as a proposal which will do nothing to reduce the inefficiencies in the present provision. It is virtually a perpetuation of the status quo of inappropriate and inadequate organization.

Indeed, if much time and effort are given to the proposal, thought will be diverted from the very pressing and serious need to create a competent management structure for higher and further education, capable of charting its development and earning the respect and confidence of the public who pay the large sum which the provision costs.

Putting right the shortcomings of the system is not just a matter of tightening up on the resources provided to institutions at present. In the absence of a co-ordinated system for planning and implementation, that can do more harm than good. What is needed is the creation of a management structure which has the bite, authority and firmness to work out the problems of higher education in terms of a coherent policy, and to get the total resources of the system committed to that policy.

Higher education is provided in the public sector in polytechnics and other colleges, but the major proposition is still provided by the universities. There are differences of

continued on page 27

Student numbers rocketted in decade to 1973, figures show

by Sue Reid

The number of full-time students in higher education in the United Kingdom rose by more than 250,000 between 1963 and 1973, the latest education statistics published this week have revealed. In the same time the number of students in part-time higher education went up by 14,000.

The total number of students in higher education in the academic year 1973-74, both full-time and part-time, was 638,700 compared to 373,000 10 years earlier. Of them, 495,000 were following full-time courses, with more than half that number (251,200) enrolled at university.

A further 130,000 were studying at colleges of education and another 114,000 were on advanced courses in further education establishments.

More than 143,000 students were on part-time higher education courses in 1973-74, about 24,000 at university and the rest following advanced courses in further education colleges.

About 10 per cent of all students at universities and 8 per cent of students on advanced further education courses were from overseas in 1973-74. Taking into account non-vocational courses nearly 4,000,000 students were enrolled on full-time and part-time courses in further education during that year.

Subjects of study at undergraduate level showed variations in the three main geographical areas. In England and Wales the largest proportion of students, about 15 per cent, were on engineering courses in 1973, compared with 11 per cent in Scotland and 9 per cent in Northern Ireland. During the same academic year arts were most popular in Scotland and in Northern Ireland.

Language and literature attracted the second largest proportion of students at undergraduate level in England and Wales during 1973, compared with 8 per cent in Northern Ireland and 7 per cent in Scotland.

Education Statistics for the United Kingdom 1973. HMSO; available at Government bookshops, price £3.50.

'Open facilities to public' call

A plea for universities' social and education facilities to be available to as many citizens as possible was made last week by Mr Tony Martin, principal industrial relations officer of Lothian Regional Council, when he was installed as honorary president of Heriot-Watt University Students' Association.

Mr Martin, former Scottish Universities Officer for the National Union of Public Employees, said that each university was a living entity with roots in the community. Whilst, like all other sectors of education, they were suffering financial difficulties, they remained among the most privileged sectors of society. Such a position required them to provide services which were beneficial to the community.

He said a university should be the setting in which students, academics, administrators and other staff shared in the distribution of facilities which were offered in learning and government.

At the installation ceremony, attended by Dr George M. Burnett, vice-chancellor of the university, Mr Martin pledged himself to the "reconciliation of conflict, the abolition of mistrust, and the establishment of mutual respect between students and educators".

He defended the right of students to be treated as adults. Students were now one sector of adult opinion, voicing criticism of the social, economic and educational organization they were experiencing and making demands in relation to the qualities of education they were receiving.

As citizens, said Mr Martin, they wished to exercise their democratic rights. Their students' union was no longer a mere association of student societies but an adult pressure group for the defence and improvement of conditions.

News in brief

Wanted: academic tour guides

Albion Itineraries, the travel firm, is seeking qualified academics to plan and conduct a series of unusual five-day holiday tours in Britain during 1976.

The lecturer will choose the tour's theme and specify its route. The firm will organize a party of between 15 to 20 people and make all the necessary arrangements.

Applications are invited from academics in all disciplines, but historians, archaeologists, architectural and art historians are particularly needed.

The firm says remuneration will be generous and all expenses paid. Albion Itineraries, Westerfield House, 1 Bellita Villas, Islington, London N1 1PE.

Poly courses guide out

The Handbook of Polytechnic Courses for the academic year 1976-77 is now available. Published by the Committee of Directors of Polytechnics, it gives details of more than 3,000 full-time and sandwich courses available. It can be obtained from the CDP Secretariat, 309 Regent Street, London, W.1. Price £2.95p.

Service for Dr Foster

The memorial service for Dr John Foster, CMG, former secretary general of the Association of Commonwealth Universities, will take place on Friday, December 12, at 2.30 p.m., at the Church of Christ the King, Gordon Square, London, WC1. Dr Foster died in September at the age of 72. He had been secretary of the ACU since 1947.

Aid for women workers

A booklet to help women who want to go back to work later in life or are considering training for a new career has been produced by the National Advisory Centre on Careers for Women. It contains chapters on educational opportunities, the social services, office work, industry and commerce, health and hospitals and work with children and young people.

Returners, from the National Advisory Centre on Careers for Women, 251 Brompton Road, London SW3 2HB. Price 85 pence.

Like father like son

A father and his 23-year-old son are among new students at Keele University this term. Mr Gerald Plant, who is taking a three-year BA course in international relations, and his son David say they decided to apply independently of one another.

Bradford booming

Student numbers at Bradford University are booming according to recent estimates of new students admitted this term. The new intake numbers 16 per cent more than in 1974, compared with a national increase of only 7 per cent.

Much of the Bradford increase is due to the popularity of new interdisciplinary courses, particularly in peace and medical studies.

Don's diary

Woman's week

Monday

Problems begin. In first half hour discover that students on two of my courses have time-table clashes. Swear violently and throw papers across desk. Term began two weeks ago and still haven't been able to find times suitable for entire group. Every time all agree someone else changes the schedule.

Rearrange class for third time and consider other problems. Major difficulty of running minute one-woman graduate school is time spent on organization. Lose hours every day writing memos, hunting lost files, chatting up colleagues to persuade them to help supervise student theses.

Difficulties compounded by lack of arts common room where could meet colleagues informally and settle question over coffee or pint. As things stand, am in privileged position of having office near kitchen, so can at least entice people round for cups of tea. Even tea no problem this term, due to kettle having been pinched at the end of summer term. Kitchen now kept locked and kettle chained to sink.



Have no time for lunch because rehearsing scenes from melodrama with colleagues for nice senior colleague's inaugural lecture. Am apparently incapable of memorizing 10-line part. Colleagues very patient. Work on two attempted rape scenes then back to, meet students with thesis problems.

Colleague drops round for tea, moans about UCCA forms. Smug feeling that with running graduate school UCCA problem now shelved. Recall first time ever confronted with fifty UCCA forms when still young and innocent and asked group of colleagues in Senior Common Room how to proceed. Noted all advice for use later in satirical novel. Notes as follows:

First colleague (Marxist) said eliminated candidates with father's profession clearly middle-class (e.g bank manager).

Second colleague (Right-wing) said eliminated all candidates with father's profession clearly manual work (e.g dustman).

Third colleague (eccentric) said always rejected anyone without A-level maths (to read English?)

Fourth colleague (young) said favoured mature candidates.

Fifth colleague (older, but not much) said opposed to mature candidates, favoured young ones straight from school who hadn't lost ability to conform.

Sixth colleague (authoritarian) said judged candidates exclusively on headmaster's report.

Seventh colleague (anti-authoritarian) said always ignored headmaster's report because most headmasters blinded weirdos anyway and ignored exam results because exams an inadequate mode of assessment.

Noted own horror at loss of belief in fair, democratic system.

Tuesday

Arrive late, exhausted. Always find shifting gear from morning routine of rinsing nappies, feeding cat, taking child to creche to contend discomfort very hard. Moving from life into art. Might be useful point to make at meeting of next anti-realist novel group.

Experience great difficulty in getting group to discuss abstract concept of reality. Group suggests that "reality" is "what D. H. Lawrence wrote about". Suppress desire to exhibit ruined Latin-American poetry lecture notes as evidence that D. H. Lawrence as unreal as the next. Spend half an hour trying to read notes, after car and child spilled cocoa the night before.

Disturbed today by rumours (yet again) that crèche to be closed. Prices already increased dramatically (though lower than some universities according to grapevine) and only 15 places for entire university population. Resolve to punch next person who tells me women have equal opportunities in university life and all disadvantages imaginary.

No lunch because free hour clashes with editorial meeting. Afternoon coffee with students who tell me imagination is what's needed to read a book but not needed to watch television. Remark triggers off lengthy speech presenting strongly held view that educational system needs completely overhauling and ideas of literacy of even 10 years ago now out of date.

Students argue that reading and writing essential. Argue that new concepts of visual and verbal literacy shouldn't be undervalued. Students retort that kids today sit mindlessly in front of television sets. Argue that kids yesterday sat mindlessly over boring books. Further argue that kids who watch television are learning to adjust to patterns of visual literacy most elders can't grasp because trained only to read words on page.

Child growing up with electronic media must have different concept of world and of learning. Conclude speech with statement of belief that living in time of change as major as Renaissance.

Convince one student of validity of argument but others still unsure. Continue same discussion at dinner with colleagues claiming standards declining due to "mass education". Protest that problem in Britain is too few university places not too many because too few perpetuate belief that university education somehow a privilege awarded to small deserving minority.

Colleague (educated in Britain) expresses horror that system might move towards degree facsimiles of United States system. Colleague (educated in America) claims United States students more enthusiastic, harder working, teaching conditions better. Pull onesupwomanship and claim that on basis of teaching in three systems cannot see any difference between standards of any.

Colleagues express disbelief, so grant point that facilities very different in all three systems but argue that motivation of students in Britain and United States systems better than in British because students not brainwashed into believing that university implies step up social ladder and teaching in schools not geared exclusively to achieving highest number of university entrants.

Am accused of being "another bloody lefty" by colleague who insists on declining standards routine. Argue most of evening. Build up to nasty climax averted when hostess tells us discussion is what university life is all about.

Wednesday

Teach all morning. Comparative literature methodology. Reflect have read eight books for one seminar, resolve to ease off in future. No lunch because class runs on until time to collect child from creche. Afternoon taken up with meeting. Discover to horror that finances for year have gone wrong. Comparative literature apparently not listed on estimates.

Start ringing up all around university, discover nothing. Bureaucracy very helpful but can't explain where money is if at all. Panic at thought of starting academic year with no money to pay colleagues already invited to give guest lectures. Friend suggests alternative form of payment if visiting colleagues male. Not in mood for sexist jokes, particularly because earlier was chased round office by cheery drunken colleague welcoming me back to new term.

Protest at meeting reveals second problem. University run on basis of faculty and sub-faculty meetings. Can't get seat on faculty board because deemed unfitting to set precedent of ex-officio members of graduate schools on board but told that shouldn't discuss graduate matters at sub-faculty because only for undergraduate affairs. Wake up to fact that have no voice anywhere except through chairman of comparative literature committee. Go home perplexed, read *Catch 22* for anti-realist novel course.

Thursday

Keep trying to find where money is but draw blanks. Also draw blank trying to coax students to discuss realism and anti-realism. Seminar group more concerned with finding out whether course to be assessed or examined. Explain patiently that opposed to examinations because of need to limit teaching to prepare students to condense year's work into three hours.

Opposed also because of anti-democratic marking. Tell a few tales from notes for satirical novel of former colleagues discussing marking finals: "I only need to read the first paragraph. One can always tell the quality of a student's mind from that first paragraph". Opposed also because tired of hearing students say not time to read extra books because won't be examined on them. Try to get back to reality.

Student says all this is useless, challenges me to give reason why reality need be discussed at all. Needled, so say one good reason is because don't want to read N number of essays telling me "reality is what D. H. Lawrence wrote". Student says essays will only be as good as titles set. Struck dumb, then reflect student an unfortunate result of badly flawed educational system so rely urge to get up and leave.

Have dismal lunch (tomato juice) with colleague in arts centre and compare notes. Reveal that can only find one man remotely interesting in approximately 3,000. Colleague says am one up on her.

Spend afternoon sorting out time-table clashes again, phoning round re money, dictating memos. Begin work on article (deadline in two weeks) when colleague comes by to continue discussion on declining standards. Claims to have solution to problem. Would eliminate democracy altogether, abolish grants, reduce size of universities, interview every candidate personally.

"Let's throw out this democracy myth and have a good healthy autocracy instead." Asks would that solve problem of elitism. Am totally puzzled, then realize colleague has understood reverse of whatever said.

Begin again to explain that am opposed to present structure of universities because is a half way house between two poles—still elitist but with pretensions of being liberal. Colleague says cannot understand what am on about, starts again about declining standards. Lose temper and throw colleague out. Too late to continue article, rush out in rain to car parked half mile away. Am half way home before realize have forgotten child.

Friday

Spend morning shopping for outfit to wear for melodramatic scenes, then back to campus with child and friend for visit to university theatre.

After theatre take child back to office to collect papers for weekend work. Child's friend unimpressed: "My Dad's got a forklift truck in *his* office."

Sign heap of letters, ask if any news on missing money. Am told by secretary that all still a mystery and no one in on Fridays anyway. Postpone worrying till Monday. Secretary says look tired. Say am exhausted, feel middle-aged and only weekend with Burt Reynolds could revive me.

Child inquires about large piece of monstrous mural outside arts centre. Explain is a piece of sculpture. Child's friend says looks like secret weapon. Agree and reflect that rumoured cost of £10,000 might have saved periodicals cancelled by library due to lack of funds.

Maybe kettle thief will try to saw way through it one Saturday night later in term. Or maybe could be used to shut children in if crèche closed by university and enough money saved to cut out doors and windows.

Child still puzzled, wants to touch it. Stop car. Child gets out. "I have to see if it's real, Mummy." Don't we all?

Susan Bassnett-McGuire

The author lectures in the Graduate School of Comparative Literature, University of Warwick.

Portrait of the author as young man with sociology



DAVID MARTIN

The only form of fiction I really enjoy is autobiography. It's the only form of fiction I ever want to write. For that matter the only thing I ever write is autobiographical fiction. But I need a plausible excuse for doing it openly and explicitly. Here it is. The animal I once was is now extinct. After me the Open University.

Twenty years ago to this Remembrance Day the children filed out of my classroom, and disappeared down the streets of a sleepy Somerset town. The Welsh teacher on the other side of the partition wandered in. "Ever thought of taking a degree in sociology, man?" I'd thought of taking a degree but definitely not in sociology.

All the same I was interested enough to run my eye along the sociology shelf in the tiny town library. I took out a book on 'applied' to be demanded. "Define 'applied'" I said upon this book, provided you never ask for another book again. It costs 2/6d you know."

My parents bought me five books which became the basis of my library: Hamilton's *History of the Homeland*, Moser on Sociological Methods, Maclver on Society, Sorokin on sociological theory, Ginsberg's *Essays*. I read a chapter a week, then the commentary in the green lesson and then I wrote my essay. The first essay was marked 4 out of 10 and I felt unappreciated. Perhaps this wasn't for me.

I tried again. 5 out of 10. Perhaps I would keep going just for a bit. One tutor mystified me by always awarding 4 out of 10. No matter how I tried he barely altered his considered mark. No matter whether it were the Scottish moralists or Kume, or Kant, or T. H. Green my standard remained consistent.

Some of the questions in sociological theory were rather bizarre; "Discuss the view that civilization moves steadily northward".

In some areas the green lessons appeared to be stacked together like a child's bricks from several different boxes. It was difficult to believe the statistics had been prepared with any thought for the sociology syllabus. The book was 600 pages long and the proof of the regression equation took two green pages. I almost gave up on the suspicion that a degree was not for the intellectual likes of me.

Criminology had me puzzled for another reason and I wrote to my tutor saying the boundaries of the subject were hard to defend. He replied and I replied. I kept hammering on and eventually received another letter.

The green lessons in "social psychology" arrived with a personal note: "Your tutor is a retired professor of economics". Overwhelmed at the weight of academic authority at the other end of the line, I decided to ask questions.

He wrote back with magisterial confidence. "You should know that the mind has 14 basic faculties, as follows." My confidence reeled. I could at least read and the book said faculty psychology had passed away decades ago.

After a year I moved to teach in London and was able to use the university library. I guessed which books were in use by the fact they were hardly ever available. Then one day my eye was struck by an odd title, *The Elementary Forms of the Religious Life*, by E. Durkheim.

Heavens below, a work on convents, I thought. I read on and on but never a convent. The world expanded, turned like the primal nebulae, whirled at infinite speed, and slowly cooled into a new shape. *Les Formes Elementaires* left me a changed man.

A year before finals I thought it would be sensible to buy some past papers and when I did so I had quite a shock. In some areas the overlap with the green lessons was pretty tenuous. I decided to devise my own course from the papers and keep up with the green lessons at the same time.

Clearly my gentle ambling pace would need stepping up. The first week was holidays and I did 60 hours. When term came I willed to discipline myself to: evening: 4.30-8.30, 9.30-10.30: five hours a day. A cigarette and a walk along the towpath to Barnes Bridge 8.30-8.45. I was as regular as Kant in Königsberg.

By Christmas my mind began to behave rather oddly, with after-effects which were to last eight years. Music had no meaning. I walked out of cinemas and theatres 15 minutes after entering. I felt as if I was exploding and imagined a hundred diseases in an accelerating spiral of fear. I was a kind of robot equipped with rapid angry reflexes. I made the deterministic assumptions of sociology into existential premise and the whirling nebulae became a dead universe, meaningless and godless.

Six weeks before the examination my mind disjointed. I could not read or write and walked up and down staring into space. I remember the words where I stopped. Maritain: "With Grotius the tradition of natural law was already in decline". I never found out why and I still do not know.

Amytal took me to the Chelsea examination halls, but after the first paper I became so absorbed I forgot to take the pills. One fellow examinee held me with his glittering eye and said: "How many times have you been? This is my seventh". At the end of thirty hours writing I decided there never, never would be another time.

I walked on and on not knowing whither I went until I found myself by St James, Piccadilly. G. F. Handel *Judas Maccabaeus* it announced. I staggered in and realized I could listen to music at last.

Three months later the doors of the LSE opened and I met real academics. O. R. MacGregor put it to me that I should either study deserted wives or the sexual habits of the English people. A pleasing vision of notoriety seduced me for a moment: "The Martin Report". But I felt inadequate and I passed. Not Mrs Flood. A woman. "You have been a nuisance to us", she said. "We were trying to abolish private candidates." She told me I should study Labour Education Policy 1926-1927". I humbly said I wanted to study Mannheim, and an expression of distaste crossed her face.

Next, Richard Titmuss. He said I might study the improper manipulations of the political process by insurance companies. I went home rejoicing to be in the Service of Socialism but I kept falling asleep over the books and began a habit of sleeping in the day I have never shaken off.

"What would *you* like to do?" he said kindly. Subconsciously I chose words bound to get me out of the hole. "I would like to study how the reading of Hume and Meister Eckhart is associated with revolution."

To Donald Gunn MacRae. "I can see you are interested in the Urthemes of European civilization." Thus was it. Ur-themes. You've read Curtius of course?" Several libraries later he concluded: "You'll find Schmidt's essay in Klibansky's volume particularly useful. It's on the theme of *veritas filia temporis* in Renaissance woodcuts". At last. The University.

Rosemary. Thanks for remembrance.

Alan Cane reports on Royal Holloway College, London

College life in an ornate liability

The magnificently ornate main building of Royal Holloway College, London, is one of its chief assets and a major liability. Now used chiefly as student residences, it has been listed as of special architectural and historical interest—and costs a small fortune in upkeep and maintenance.

Ironically, the college possesses a fine collection of nineteenth-century British paintings including famous works by Constable, Gainsborough, Turner, Frith, Landseer and Millais which, held in trust, it could not sell even if it were desperate for funds. Even if it could the money raised, while substantial by any standards, would hardly pay maintenance of premises costs for a single year. (In 1973-74, maintenance and energy bills came to £267,090.)

The main building was built in French renaissance style using red brick and white Portland stone by the architect W. H. Crossland. It was a free adaptation of the chateau of Chambord in the Loire valley and now dominates Egham Hill, Surrey.

Professor J. B. Pridham, biochemist and deputy principal, emphasizes the problems in maintaining such an idiosyncratic structure: "It is built of a special kind of brick which is soft and needs continual maintenance and replacement. There are expensive curved glass windows and the druggets on the floor are fraying badly and must be replaced. Something will have to be done before very long."

Professor Pridham went on to point out that the college has opened new buildings but has only the same amount of money for cleaning. He is concerned about the cost of implementing new regulations on health and safety in laboratories, pointing out that fire doors in the chemistry department have shrunk leaving gaps which cannot be tolerated—the cost of replacing them will be £6,600 at today's prices. Few of the college buildings have a janitor or caretaker.

Royal Holloway College, founded in the nineteenth century by a benevolent millionaire pharmacist, Thomas Holloway, has been a constituent college of London University since 1900. Originally a women's college it began to admit male undergraduates in 1965. The first men to enter the college were, by all accounts, a mixed lot. Professor Pridham describes them a little mysteriously as "a bunch of rockers".

Now there are 682 men and 773 women undergraduates and 129 men and 65 women postgraduates. The college maintains a number of old traditions much, it seems, to the liking of the staff and students. "We have a real college life here", Professor G. N. Sanderson, a modern historian, emphasizes.

Financially, the college is in the same desperate straits as other universities. It seems satisfied with its share of the London University award from the University Grants Committee, yet it is not enough.

Professor Sanderson emphasizes that the real problem will be ending the quinquennium in credit and Professor Pridham agrees, pointing out: "It is highly unlikely that we can survive financially until the end of the present quinquennium if the grant for 1976-77 is no better in real terms than that for 1975-76".

He went on: "We have cut all we can cut; now all we have left to cut is staff. Redundancy is not a word we would have countenanced 18 months ago. Now we are talking about it."

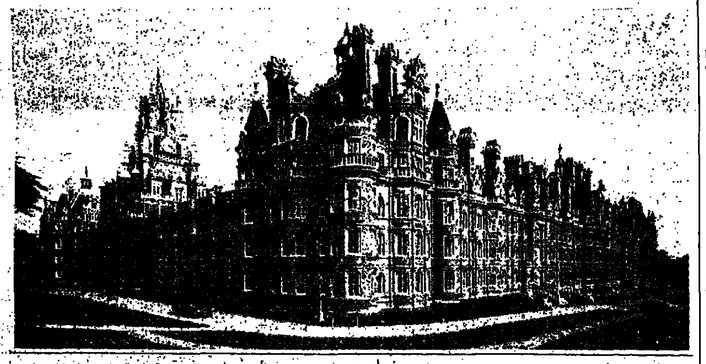
Among other economy measures, the college has set up a research advisory committee to look at all new grant proposals. Professor Pridham says regretfully: "A few years ago we were in luxury on the science side—now we have to set up committees to fight for the money". All the science departments have had their running costs pared this year to help support the library.

On the arts side Professor Sanderson says that departments growing explosively have been hit worst by the economies.

While arts departments did not have to buy expensive equipment they had problems finding support staff such as secretaries and research assistants.

Nevertheless, academics from all departments talk of a marked improvement in the quality of student they are getting, which they attribute partly to an aggressive campaigning policy in the sixth forms.

Research languishes under a cloud as teaching duties become more onerous. Professor Pridham says: "Prospects for promotion have gone right down the drain. My staff are not able to give adequate time to the only thing in this life—research—that enables them to progress." Professor Sanderson agrees: "Academics on the arts side cannot even think of undertaking research except in vacations."



David Hencke examines a new teacher training course at Goldsmiths College

Practice makes perfect teachers?

The one-year postgraduate certificate of education is widely considered the most unsatisfactory of all teacher training courses because it aims to compress three years work into one.

Many of its exclusive graduate intake become irritated with the superficial level of study given to a whole range of subjects, from psychology to sociology, combined with an often incoherent mismatch of theory and practice.

The publication of a report, *The Making of a Teacher*, last month describes a refreshing attempt to develop a new one-year course for primary teachers at Goldsmiths' College, University of London, which took a completely new approach to the problem.

The course was developed by Mr Leonard Marsh, now principal of Bishop Grosseteste College, Lincoln and has been monitored by a free-lance journalist, Mr Christopher Griffin Beale, who compiled the report.

The Goldsmiths' course had a number of unusual features: not the least, a specially constructed "Plowden Floor" which provided a quasi-primary school environment far removed from the conventional uniformity of higher education seminar rooms.

It included a particular emphasis on display work with the aim of ensuring that the trainees were proficient and imaginative craftsmen as well as good teachers of the three R's.

The whole emphasis was on a "child-centred" approach with trainees spending as much time in schools as possible, relating the needs of children and schools to the academic theory provided at college.

The organizational nerves of the course is described by Mr Marsh in the report. "I wouldn't spend very much time in an initial course talking to students about whether schools should be streamed or unstreamed, or similar organizational questions. I think all those questions can come up in relation to their own teaching experience with in the classroom.

"The decisions which can be just as fundamental in their influence on the schools are those which they must make every day about the organization of their own classroom and the children's activities. These decisions will be based on their ability to perceive what they children need most urgently."

The value placed on classroom competence rather than academic ability is noticeable throughout the course. It is clear that the university background of most applicants is not considered the best preparation for primary school work.

Mr Marsh states: "At best our students have been involved in an exciting three years of speculative thinking, and at worst a course totally bereft of personal content or significance. Our task is to help them all grow beyond purely speculative thinking. We have to exercise the imagination in a real-life, professional and constructive situation where thought must lead to action."

Students seemed to realize this which at least showed that the course was communicating to its students that academic ability does not produce the best teachers. One student is quoted as saying: "There isn't an easy translation from the university to the primary school. To come in simply with those ideas and preoccupations is meaningless to the people in the school.

"That's a recipe for disaster, if you and the kids aren't about the same business."

What the report does not cover is the effect of this imaginative course once students start teaching. Are they able to continue their approach or are they eventually disillusioned by the realities they face in many tough, rough and sometimes badly-managed urban primary schools?

The Making of a Teacher: A Study of a One-Year Postgraduate Primary Course. Available from Bishop Grosseteste College, Lincoln. Price £1.25.

Department of Education and Science

BASIC UNIVERSITIES STATISTICS

APRIL 1976

United Kingdom

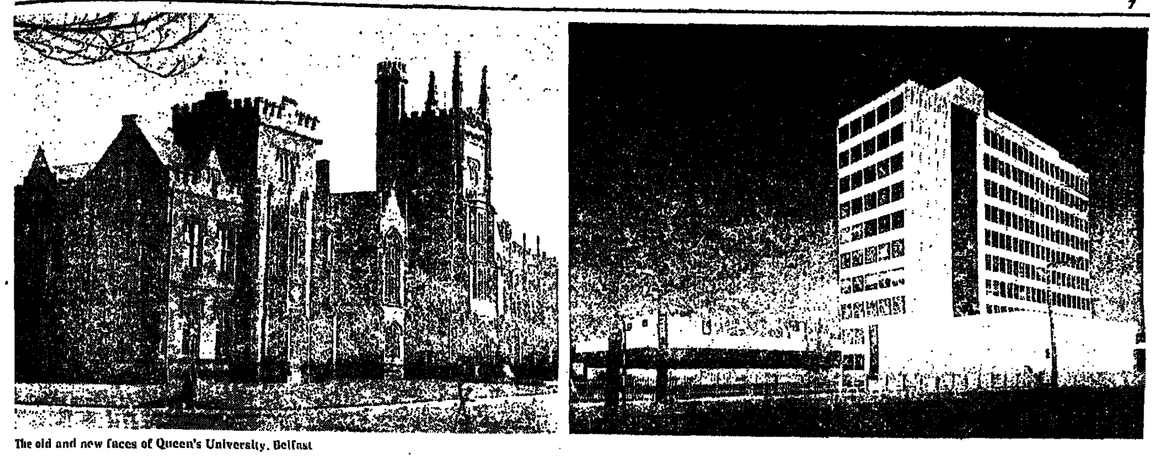
	1965-66	1971-72	1972-73
NUMBER OF UNIVERSITIES			
Great Britain	44	43	43
United Kingdom	45	45	45
FULL-TIME(1)			
STUDENT ENROLMENTS (2)			
undergraduate level—men	101,519	130,922(3)	130,334(3)
—women	38,660	59,571(3)	62,715(3)
of which			
from overseas	7,479	7,817(3)	8,706(3)
qualification aim			
first degree	135,429	187,036	189,938
other	4,750	3,457	3,311
postgraduate level—men	22,568	34,356	36,193
—women	5,860	10,136	10,924
of which			
from overseas	8,220	11,839	13,103
nature of study			
taught courses	n.a.	21,116	22,440
research	n.a.	23,376	23,677
total GB students(3)	169,486	234,985	239,366
total UK students(3)	174,215	242,563	246,813
NEW ENTRANTS—FULL-TIME(2) (3)			
undergraduate—first degree	49,779	62,752	63,712
—others	2,446	2,217	2,399
postgraduate	n.a.	28,038(4)	27,889
total GB new entrants	n.a.	93,001(4)	94,000
undergraduate—first degree			
—UK	51,168	64,994	65,519
—others —UK	2,467	2,347	2,538
postgraduate—UK	n.a.	28,816(4)	28,650
total UK new entrants	n.a.	96,157(4)	96,889
PART-TIME ENROLMENTS			
undergraduate	4,506	3,329(3)	3,095(3)
postgraduate	7,939	19,256	19,534
total GB part-time(3)	17,004	22,585	22,626
total UK part-time(3)	17,636	23,547	23,556
UNIVERSITY RESIDENCE(2)			
of full-time(4) students —			
college/halls of residence	55,658	91,563	98,673
lodgings/flats	80,684	99,203	96,184
home	30,386	38,672	38,187
other	n.a.	5,347	6,322
DEGREES AND DIPLOMAS AWARDED			
first degrees—GB	31,887	50,054	n.a.
—UK	32,689	51,782	n.a.
first diplomas—GB	3,303	701	n.a.
—UK	3,547	765	n.a.
ACADEMIC STAFF—			
all full-time teaching and research			
professors —GB	2,491	3,575	3,737
—UK	2,555	3,676	3,851
readers —GB	4,404	6,305	6,737
—UK	4,492	6,448	6,909
lecturers/assistant lecturers			
—GB	16,997	22,576	23,150
—UK	17,272	23,134	23,769
others —GB	1,402	1,782	1,971
—UK	1,460	1,801	1,993
total —GB	25,294	34,238	35,595
—UK	25,779	35,059	36,522

(1) Including sandwich students taking courses not of a university standard. (2) Figures refer to GB unless otherwise stated. (3) Estimated. (4) Estimated.

	1965-66	1970-71	1971-72
INCOME AND EXPENDITURE			
INCOME (£ million)			
exchequer grants	124.208	230.112	267.631
grants from local authorities	1.899	1.695	1.580
endowments and donations	3.330	4.785	4.626
fees	12.498	20.457	21.951
research grants	18.027	40.749	44.456
for other specific purposes	4.460	9.285	10.921
miscellaneous	2.981	5.062	5.050
total	167.403	312.046	356.215
of which			
England	133.629	245.524	280.143
Wales	8.937	16.137	18.482
Scotland	22.168	43.611	49.638
Northern Ireland	2.669	6.774	7.952
EXPENDITURE (£ million)			
teaching and research	110.351	203.031	230.990
academic services	8.186	21.800	26.131
other general educational administration	4.349	7.753	10.838
maintenance of premises	11.207	21.958	25.285
student amenities	22.729	44.257	50.771
miscellaneous	2.477	5.235	6.781
capital met from income	2.442	3.030	3.990
total	1.676	3.146	2.515
	163.617*	310.290*	355.852*
of which			
England	130.505	243.480	279.048
Wales	8.771	16.333	18.836
Scotland	21.730	43.691	50.059
Northern Ireland	2.611	6.786	7.909
NON-RECURRENT GRANTS (£ million)			
Great Britain only			
equipment and furniture	20.852	29.355	29.722
other (including building)	59.023	39.108	41.995
total	79.875	68.473	71.717
CONSTANT PRICES			
Better comparison of the figures given for earlier years with those for 1971-72 can be obtained by updating for cost increases.			
For example:			
total expenditure (£ million)	233.972	350,131	355.852

The Department of Education and Science publishes some of the best statistics in Whitehall. Its service now includes a series of packet-sized cards summarising statistics of schools, school-leavers, GCE and CSE, further education, teachers, finance and awards, and universities which can be obtained free from the Statistics Branch, DES, Elizabeth House, York Road, London, SE1.

As a new service to readers, The THES will be publishing in full the cards on universities, further education and education when they appear.



The old and new faces of Queen's University, Belfast

Sir Arthur's civilized oasis in a land of terror

David Walker interviews Sir Arthur Vick who is retiring as vice-chancellor of Queen's University Belfast

The university in Belfast is redolent of civic pride. Its vaulted stone vestibule and students' refectory hung with portraits of benefactors and civic dignitaries attest warm and close relations with the commercial city around it. But there normality ends.

Queen's University is only a car ride away from the troubled districts of the Ardoyne, the Falls, Ormeau Road; and yet Queen's has been largely unscathed. They do not search your bags as you enter and inside a truce seems to reign.

Queen's and the firm tradition of higher education that it embodies goes on, despite the barricades and wire meshing in the streets around. The credit belongs in part to the long-standing good relations the university has with the city and the province. Few other British universities can boast the strength of feeling Queen's graduates retain for the place. In few other places are government and the professions packed with home-grown graduates.

But the credit also lies with Queen's vice-chancellor, Sir Arthur Vick, a university leader of the old school, who retires at the end of this academic year. Some institutions seem to go on almost as if they did not need leadership, but there are few Belfast men who would deny the firmness of Sir Arthur's resolve in the face of the troubles.

As a senior academic with long experience of the university said: "Sir Arthur has made a masterly job of this balancing act between the various sides. Though he looks so spare and wiry, he is a very tenacious character. He made up his mind at the beginning of the troubles to assume nothing was wrong and all sides have admired his refusal to admit there is a problem for the university."

Sir Arthur will be missed, and not least by the university's non-academic staff. Queen's, like the Scottish universities, accords its principal and vice-chancellors a deference that would embarrass in England. But the warmth of the staff's regard for Sir Arthur's apparently aloof figure goes beyond mere respect. He has a personal word for domestic staff and porters and they reciprocate with loyalty. Last year, during the Protestant workers' strike that paralysed Ulster staff, Protestant and Catholic, walked to the university when the buses did not run to keep the place open.

Yet for all his fitness to weather the violence of Ulster, Sir Arthur came to a peaceful and expanding university in 1966. It is wrong to see the violence as incipient in the 1960s, for Sir Arthur came to a blossoming university nurtured under the hand of Sir Eric Ashby in a quiet province.

He came to Queen's well qualified to occupy the vice-chancellor's lodge, experienced in top-level physics research, university administration in the early years of Keele University and latterly head of the research team at the United Kingdom Atomic Energy Research Establishment at Harwell.

Sir Arthur very nearly took the vice-chancellor's role much earlier, when he was at Keele in the 1950s. Keen on the teaching of science in a broad humanistic way, he had been attracted by the opportunities the new and rather ramshackle University College of North Staffs offered. A close friend of Lord Lindsay, Keele's first principal, he took over briefly on Lindsay's death.

But although it did not lead to a permanent appointment as vice-chancellor, perhaps to Keele's loss, they were happy years for him. He was schooled as a scientist, but resuscitated at Keele the close contact he enjoyed before the war at University College London with men in the humanities, refining his concept of the university as an all-round institution.



Sir Arthur Vick

After Keele, in 1959 he went to Harwell first as deputy to Sir Basil Schonland and then as director of the research group, later becoming a member of the UKAEA. A colleague of the years recalled: "He was a very even-tempered person who always turned up and did his piece come rain or shine. He was ready to talk to everyone and anyone, and hear their ideas; but when it came to steering through large projects he was strong.

"He was a master at formulating a case that would get through the authority. I would cite the purchase of a variable energy cyclotron—a big job that cost a lot of money. Of course, it helped enormously that he had been a research worker with understanding and sympathy with working scientists."

Although his career never avoided the metropolis—he spent three years at University College London before passing the war in the Civil Service at the side of men like Sir John Cockcroft—Sir Arthur stands out as a man who epitomizes much of the best of the British provincial tradition. Educated at Birmingham schools, he went through Birmingham University to his PhD in the early 1930s and after the war joined Manchester University physics department.

Manchester science just after the war seemed to experience such a burst of talent with men like Lord Blackett, Willis Jackson, a string of Nobel laureates and a vice-chancellor sympathetic to Grand Departmental Designs. They were stimulating years, although during them Sir Arthur probably decided that he would make an administrative career for himself.

At Queen's from 1966, Sir Arthur inherited and embellished the plans laid by Eric Ashby and his immediate predecessor Michael Grant. He was a man who got to grips with the nitty-gritty of an expanding university, a widely acknowledged master of budgeting and financial work that holds institutions together.

A senior colleagues of Sir Arthur's emphasized his *sang froid* and technical ability, suggesting they were rooted in his scientific training. But it would be wrong to underestimate the power of his imagination, or the warmth of his feelings for Queen's.

Beneath the imposing front, he is a warm man; this is displayed in the way he recounts how in passing through Singapore he was entertained by the flourishing club of ex-Queen's graduates there, who hoped that their children would be good enough to be admitted to Queen's.

Sir Arthur sees the merits of Queen's in its range of faculties and its balance between scholarship and the university virtues and the needs of the province. He focuses particularly on the highly regarded medical school.

His policy has been to recruit the very best staff possible with a premium on experience in universities outside Ulster. The same applies to students. Plans in the 1960s were for 70 per cent local intake, then came the troubles and a rise in the proportion of local students to about 95 per cent.

In the wider university world, Sir Arthur has been associated with a score of committees within the Committee of Vice-Chancellors since he was at Keele 23 years ago. To that must be added his work on the University Grants Committee in the formative years of the late 1950s.

Within the councils of the CVCP, Sir Arthur has been listened to. His knowledge of Queen's is unrivalled and his virtues those of wire, firmness and very hard work.

No man who embodies an almost feudal authority in the way Sir Arthur does could escape criticism. Some of the staff found his unflappability become passivity; the students have resented his paternal aura and his imparitality. But on the testimony of the present set of Queen's student politicians he is unfailingly available and the university is quite up to date in its machinery of participation for both staff and students.

But even this catalogue of Sir Arthur's vice-chancellorial style might not have been enough to keep the university together after 1969. A senior colleague described the rancour of student protests during the days of the first Bogside and People's Democracy.

"He was a model of moderation through the troubles and taught me what turning the other cheek really means, when he took some of the students' comments in their newspaper and elsewhere with equanimity."

Sir Arthur bequeathes his successor a university well equipped with a smooth-running administrative machine, afflicted like all universities with money worries and with its major growth now behind it. Most important, it is a functioning academic community and one of Belfast's proud monuments to the maintenance of civil society in the face of terrorism.

Sir Arthur Vick will leave Belfast for retirement in the peaceful Forest of Arden with his apolitical integrity unscratched by bullet, bomb or major upset in the university's academic life. He will leave Belfast, too, with something of the city's sense of humour. As he says: "If I put a foot wrong the whole thing could blow up in more than one sense of the word."



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LETTERS TO THE EDITOR

NELP DipHE

from Mr Alex Rehmann-Huber

Sir,—I have yet to read any cogent arguments in favour of the North East London Polytechnic Dip HE scheme. This is in spite of a careful reading of their original submission and the subsequent adulatory puffs that appeared in your paper.

The feature that I find disturbing about NELP's use of primary school teaching methods in so-called higher education is the lack of any attempt to get the students involved in an in-depth study of any one area of knowledge throughout their entire course. This leads students to be unconscious of the superficial nature of their own knowledge and of the tentative nature and limitations of knowledge in many areas.

Another disturbing facet of NELP gleaned from advertisements for Dip HE staff is that the student project work is to be supervised by generalists who will be responsible for the supervision of work in many areas. Student projects often tend to be superficial unless critical guidance is given while the project is chosen and carried out. As the age of polymaths is over, can any one individual give this form of guidance in a range of subjects?

There is also a more general criticism of exclusive reliance on discovery methods in higher education—it is time wasting. Structured lectures and tutorials can be used to introduce students to a wide area of complex material in a shorter time than can be achieved by discovery methods alone. Without such guidance, the current literature in subject areas with a strong theoretical underpinning will be either confusing or incomprehensible to the neophyte.

Your uncritical enthusiasm for anything that claims to be innovatory is monotonously predictable. Having taught in "wonderful innovatory institutions" I am growing cynical about these innovations, most of which have yet to prove their worth. Where your reporters see amazing breakthroughs in learning situations and widening education horizons, I see a symbiosis between naive enthusiasts and colleges engaged in a desperate hunt for student bodies to justify the swollen establishments created in a decade of uncontrolled growth.

Yours sincerely,
ALEX REHMANN-HUBER,
Social science department,
Middlesex Polytechnic.

from Mr Roy Bailey

Sir,—May I correct one point made in David Heacke's discussion (*THES* November 7) of the DipHE course at North East London Polytechnic. Mr Heacke suggested that the philosophy underpinning the NELP concept was being used in similar proposals at Sheffield Polytechnic.

While I have a lot of sympathy for the NELP course and indeed share many of Tyrrell Burgess's ideas, we are not, in fact, developing a DipHE along these lines at Sheffield. The likely development of DipHE here is in the context of overall degree structures. That is to say, it is conceived of as a coherent and integrated "moment" within a structure facilitating transfer or withdrawal according to student choice.

One question remains a problem for me and I have on a previous occasion asked Tyrrell to comment. If an objective of the NELP DipHE is that students should be able to evaluate their own work and success (and I understand this to be the case) then does this mean that a student who evaluates that he has failed, and his tutors share his evaluation, that this student has, therefore, succeeded?

Yours faithfully,
ROY BAILEY,
Sheffield Polytechnic.

The future of the colleges

from Dr Alison Grady

Sir,—Judy Keiner asks (*THES*, October 17) why there have been no articles discussing the role which a merged college can play in seeking to change its polytechnic. To my mind this would not argue well for either party if it were the approach adopted.

When awaiting a merger you are tense and fearful of losing identity. There is so much to understand about the workings of this great confident creation which cannot see you as a special case at all, but just as another block of courses, and declining ones at that. But when you merge you become a part of the even larger unit and all its wants and, similarly, the polytechnic absorbs the imperfections of the former college.

There is bound to be change because of the new mix. There are moments of regret and even despair at the complexity, the delay, the incomprehension and necessary explanation of previously unspoken aims and values taken for granted. There are also times of real pleasure when common aspirations and enthusiasms are encountered.

I approve of the open and generous attitude to newcomers and the willingness to share and plan together. Given time there is great scope for new teams gradually finding one another and planning activities across our many sites. With discussion comes gradual growth in understanding, for to voice criticism of areas we do not know invites unsatisfactory rejoinder, and mutual respect is a better base on which to build.

I have the advantage over many colleagues because I am involved in so much cross-polytechnic meeting and discussion. I believe we are planning a united move forward. All sections of our new polytechnic have much to learn from each other and a true merger is only possible in these terms.

Yours faithfully,
ALISON GRADY,
Dean of education and performing arts,
Middlesex Polytechnic.

from Mr C. R. Sampson

Sir,—May I support Mr Lowther's letter on college numbers (*THES*, October 24)? Subjects which cannot attract large enough to change its polytechnic. To my mind this would not argue well for either party if it were the approach adopted.

When awaiting a merger you are tense and fearful of losing identity. There is so much to understand about the workings of this great confident creation which cannot see you as a special case at all, but just as another block of courses, and declining ones at that. But when you merge you become a part of the even larger unit and all its wants and, similarly, the polytechnic absorbs the imperfections of the former college.

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Yours faithfully,
ALISON GRADY,
Dean of education and performing arts,
Middlesex Polytechnic.

Views on reviews

from Mr John Holloway

Sir,—I am grateful for Mrs Cigman's kind words (*THES*, October 31) and am indeed sorry for the inaccuracies she noted in my review. But I think her letter obscures the main point, which is important enough to be restated.

The Wife of Bath's Prologue and Tale, 1,264 lines in length, runs to under 30 full pages of text. Mrs Cigman's edition adds a biographical note on Chaucer, two pages on Chaucerian pronunciation, a summary of the tale, two notes (one specific, one general) on further reading, two lists of abbreviations (one of them in a note on sources), an introduction several thousand words long with 52 notes, about 400 general notes on the text in 35 pages of commentary, and (on a rough computation) well over 1,000 notes elucidating verbal points. The risk that, faced with such an edition, students will become engrossed in detail and lose sight of the major literary experience offered by Chaucer's poem seems to me self-evident.

No one believes in no annotation or commentary, but you can overweigh a students' edition with it. You cannot, I argue, that views or assessments, as in Catherine Proudfoot's "a medieval" Mrs Cigman means that she rejects my view, and doubtless other medievalists, or some of them, will support her in that.

If I am right, however, the prospect is of a very great loss at the centre, for the sake of a variety of subordinate and contributory enlightenments. Of course, the perfect student would work so as to achieve all gain and no loss at all; but that is nothing to the point. I noted the "industry and learning" at work in the edition and am glad to do so again; but I continue to think that in editions likely to become prescribed texts, to deploy those equalities on such a scale is injudicious.

Yours faithfully,
JOHN HOLLOWAY,
Queens' College,
Cambridge.

from Pamela Moore

Sir,—In his review of *Knowledge of Language* by David Cooper (*THES*, October 31) Dr Butterworth is wrong in suggesting that Cooper, as distinct from the book reviewed, does not take seriously the problems connected with knowing a language in the sense of knowing how to use and interpret it in the context of utterance. In his *Philosophy and the Nature of Language*, for example, Cooper specifically discusses the relation between meaning and use.

Dr Butterworth is also wrong in his account of the "doctrine" of analytic linguistic philosophy. This tradition does, indeed, hold that confusion can arise where ordinary words are used in an abstract sense, whether this occurs in ordinary ways of talking or in the abstract discourse of the disciplines of knowledge.

It does attempt, by careful analysis of the implications of and connexions between concepts, sometimes to dissolve puzzlement or resolve disputes. But sometimes, by clarifying just where the dispute lies, it sharpens it. It is neither conservative nor otherwise: Ryle's *Concept of Mind* made revolutionary suggestions about what "mind" should be taken to mean.

The last thing that the analytic tradition suggests is that we should stick to our ordinary ways of talking and thinking we will be all right ... " for ordinary as much as academic use of abstract language can mislead. What the Socratic tradition of analysis, as influenced by Wittgenstein, does suggest is that in looking at meaning we should take account of the enormous variety of ordinary and extraordinary things people may use language to mean.

Yours sincerely,
PAMELA MOORE,
Education department,
Goldsmiths' College,
London SE14.

from Mr J. C. Davey

Sir,—I would like to comment on one or two of the assertions made by R. J. Price in his review of the new two-volume edition of *Glacial and Periglacial Geomorphology* by Clifford Embleton and Cuchlaine King (*THES*, October 24) —especially as these relate mainly to our blurb, and to the price.

Your reviewer claims that only 20 per cent of the second edition is new. The larger format does give a 38 per cent increase in text area, however, and this together with the fact that the type size in the new edition is smaller (10/12 as opposed to 11/12) means that a full page will contain on average 5 per cent more words. These figures do not take account of deletions and contractions made by the authors to the first edition, nor of the revisions to points of detail made by them throughout the text.

It is misleading to say that the second edition costs 70% per cent more than the first edition. The students' (hardback) edition of the latter went out of print at £5.50. This means that the combined price of the second edition paperback volumes has gone up by 145 per cent. Given the increase in size, production costs and overheads, this increase cannot really be said to be unusual even though it is regrettable. The sheet unit cost of the second edition increased by 70% per cent despite a larger print run. The cloth binding increased by 482 per cent and the paperback binding cost of the second edition was 57% per cent higher than the hardback binding cost of the first edition.

The price per page of the second edition is 1.69p. Comparison with the prices of almost any section of recent books would not justify calling this expensive. For example, on pages 20 and 21 of the same issue of *The THES* nine books are advertised, quoting length and price. Taking the price of the cheapest edition, where available, the average price per page is 3.4p, the highest being 3.9p and the lowest 2.1p.

Yours faithfully,
J. C. DAVEY,
Edward Arnold,
Hill Street,
London W1.

Student grants

from Mr S. T. Broad

Sir,—The article by Peter Saunders and Eric Levin (*THES*, September 12) has received far too little attention. It shows that at one university over 59 per cent of the students do not receive what the authorities believe to be the adequate allowance because parents, having been permitted discretion in such matters, do not pay their share.

Those who have been intimately connected with university awards would confirm that such a situation is not confined to Stirling and that many students undoubtedly endure a great deal more financial hardship than is necessary at all universities and that these are the children of the better-off parents.

Ministers responsible in successive governments have undoubtedly given the impression that they are sympathetic and wish to put matters right. They know that a slight modification of the income tax regulations would immediately solve the problem and enable all such students to be paid the full allowance at no expense to the nation.

Moreover they must realise (for their advisers know) that a considerable number of staff are employed by local education authorities sending and receiving forms to and from parents concerning their income and that other staff are employed assessing the parental contribution and adjusting accordingly the grant paid to students. The administrative costs involved are quite considerable and are a waste of public resources.

The only explanation that I have heard for successive ministers doing nothing about this has been that the departments are looking into the possibility of a complete overhaul of the income tax administration and that any changes would have to await the findings.

If this is so, then the Chancellor of the Exchequer should do what his distinguished predecessor did when faced (as we were told) with an administration that would not regard PAYE as anything other than impracticable, and insist on introducing forthwith the necessary simple measure. This would not only end certain wasteful public expenditure but at the same time relieve a large number of students of financial hardship.

Yours faithfully,
S. T. BROAD,
Ayot Cottage,
Ayot St Lawrence,
Herts.

Bluff buff's blunder

from Mr S. C. Drain

Sir,—Laurie Taylor may well be a member a Stephen Leacock ("Bluff your way in Bluffmanship", *THES* November 7) who was "a delightful American comic writer, but not of course to be compared to [sic] the more surrealist Perelman". Those of us who were brought up upon the humour of a Canadian Stephen Leacock may be surprised to discover a namesake. A *caveat* to both of the bluff-your-way books: a little knowledge is all you need, but that little had better be accurate.

Yours faithfully,
S. C. DRAIN,
Mecklenburgh Square,
London, WC1.

Universities and regions

from Dr Ernest Rudd

Sir,—Your editorial on the significance for universities of regional councils" (*THES*, November 7) and "The wider significance of PEACRs is that it is being suggested for the first time that universities should join regional bodies, one of whose aims will be to promote coordinate and supervise non-university further and higher education.

The individual universities are to be represented, and have been represented for a long time, on the regional advisory councils for further and higher education, but apart from teacher training.

Yours faithfully,
ERNEST RUDD,
Sociology department,
Essex University.

more letters page 9

'University places sold to the highest bidder'

Dario Villarroel, a student, was arrested by the Chilean Junta on September 11, 1973. He was tortured with electric shocks, incarcerated with savage dogs, put in a barrel and rolled downhill into the sea. A seminar on education in Chile under the Junta heard this and similar accounts in London last week. Jane Feinmann reports.



Clash in the streets of Santiago, September 1973

None of Chile's eight university rectors attended any university classes before they were appointed by the military Junta in 1973. They are all military men, lacking any special academic preparation, and the present Minister of Education was a specialist in torpedoes, according to the former rector of Concepcion University, Professor Edgard Enriquez, who was also Minister of Education of the popular union government.

Professor Enriquez was speaking at a seminar on Chile at the University of London last week, organized jointly by the National Union of Students and the International Union of Students. Delegates from over 40 countries gathered to hear refugees from the Allende government and messages of solidarity with the Chilean people from student unions all over the world.

They were told that over 25,000 students and professors were expelled from the university at the time of the military takeover; that many were imprisoned, put in concentration camps and tortured, and that every reform introduced by the Allende government towards the democratization of the universities had been trampled underfoot.

Professor Enriquez said the Junta had seriously attacked the right to education in Chile, imposing overt and unmasked discrimination and converting universities into elitist institutions. The system of scholarships which the Allende regime introduced had been stopped. Students had to be self-financing, and fees were very high. One university recently auctioned places with no notice being taken of qualifications.

The educational budget fell from 17 per cent of the national expenditure in 1972 to under 3 per cent this year, with massive reductions in teaching personnel and equipment. In order to decrease the budget still further, the government was now selling educational research to the large corporations.

Professor Enriquez said the new system of education in Chile was designed to create a new generation, fascist in outlook, obedient to the authorities, and ignorant of the outside world. Chilean history books had been banned, even maths books were censored, and it was forbidden to teach the French revolution and the industrial revolution.

The professor read a memorandum which had been sent to all university rectors by the head of the armed forces. The memorandum listed the "crimes" for which professors must be denounced. They included making comments in class of a political nature, propagating rumours about the behaviour of the Junta, distorting ideas in set texts, holding meetings within the university precincts without the authorization of the military, and putting pressure in any way to create students' or teachers' centres.

The memorandum said that any omission or timidity on the part of university authorities would be the sole responsibility of the rector of that establishment who would be subject to immediate arrest. To carry out this order, the professor said, the authorities had spies everywhere. Sometimes a man who nobody had ever seen before would enter a tutorial and listen carefully to what was being said, and there were paid informers among the students, teachers, and even the waiters in the canteens.

In his own university, Concepcion, in the south, over 8,000 students have been "eliminated". One of these was Dario Villarroel, who was present at the seminar to give his testimony.

On September 11, 1973, the day that the Allende government fell, Dario attended a student rally along with many other students from his campus to discuss ways of defending the government. Without warning, thousands of troops invaded the campus and with considerable violence rounded up student leaders, easy enough to do because they were well-known public figures, and arrested them and many others.

Dario was taken first to the island jail of Quiriquina where for two months he was kept in a dump subterranean tunnel. Later he moved to a fort where after 13 months he was finally exiled to a remote part of Chile from which he escaped to Europe.

During his captivity, he was periodically tortured. He told the delegates he was given electric shocks frequently, put in a cage with savage dogs, immersed in sewage water and made to eat excrement. He was put in a barrel and rolled down a hill into the sea, the soldiers following him banging on the sides of the barrel.

The most painful torture was being hung by his hands in the boiling sun, his body covered with honey to attract the maximum number of insects. Once he refused to rape a comrade in front of a large audience of jeering soldiers.

At the beginning, the military were trying to get information out of him about clandestine movements but as the months went by this became increasingly meaningless.

The United Nations Commission on Human Rights examined him in Geneva and verified his statements.

He said he would probably have died if the tortures had continued for another three months. "But the human being enlarges under torture. It is not a question of personal heroism. When there is an ideal there, it is easy to resist. It has happened over and over again in history." He said there was no fear among the prisoners of their torturers.

On May 1, 1974, he and another prisoner wrote a poem on the working-class struggle called "Tomorrow, my son, will be a new day", and read it aloud to the prisoners. For this they were subjected to new tortures.

The seminar heard about resistance in present-day Chile, which, particularly in the universities, is muted. Alejandro Rojas, the president of CUFUCH, the Chilean students' federation, who left Chile at the end of last year, said that nevertheless resistance had reached the first stage towards victory because unions and federations banned by the Junta had now in nearly all cases reformed clandestinely.

There was a considerable clandestine press; newspapers were passed from hand to hand, with each person duplicating more copies.

In universities and schools the young people were ingenious in spreading propaganda against the regime—getting slogans flashed across cinema screens, chalking them on walls. One group pencilled slogans on hundreds of money bills until eventually the military had to decree that no one could use these bills any longer.

The most effective wide-spread protest in the universities so far was connected with an attempt by the Junta to make the universities totally self-financing, in other words virtually to do away with them. It brought a strong wave of protest from the university community and eventually the Junta was forced to retract.

The seminar, whose slogan was "Every university a centre of solidarity with Chile", ended with a call to intensify the demand for freedom for Chilean prisoners, to campaign for the isolation of the Chilean junta and to send an international student delegation to Chile.

Could a new commission heal the divisions?

Its Royal Charter puts quite specific responsibilities on the CNAA; its object shall be "the advancement of education, learning, knowledge and the arts". It also indicates that the Council shall have powers: "to grant and confer degrees, diplomas, certificates and other academic awards and distinctions to and on persons who shall have pursued courses of study approved by the Council at educational establishments other than universities".

Recently the Council has had to operate its Charter with a new group of institutions, the former colleges of education. Until 1973 all teacher training courses in England and Wales were validated by universities, and none of the 150 or so colleges of education came within the orbit of the Council. The James Report, the White Paper of 1972 and subsequent reorganization have changed the scene in a way well known to readers of *The Times Higher Education Supplement*.

Significantly, the universities still retain responsibility for the approval of the majority of courses offered by the former colleges. The most extraordinary fact, however, is that all diversification at degree level in the free-standing colleges has been achieved through university validation with a new crop of degrees known variously as BEds, BAs, BAs Collegiate, BScs, and so on. The reasons why major universities have been willing to undertake this task has politicai as well as educational implications, but one factor has undoubtedly been the assumptions which many colleges share about the CNAA and its procedures for validation.

Fairly familiar in the colleges are charges of remoteness which lead to the Council being compared unfavourably with the physical proximity and personal impact of the local university. The fact that the Council is largely made up of representatives from those institutions already offering Council degrees is only partly reassuring.

Less tangible, although possibly more potent, has been the resistance of many colleges to the "further education solution" which has been pressed upon them by the Government. A strong sense of institutional identity and separateness cultivated through special links with the DES, by the university connexion and the chief concern for one profession, has made it difficult to accept the new deal.

The CNAA is often seen most obviously through its role in validation; and some colleges have been uneasy about the "external" rigorous, course-dominated approach of Council visiting parties. Procedures for validation put emphasis upon detailed documentation combined with a visit with inevitably limited time to understand or appreciate the importance of the institutions quality of life, or what Dr William Taylor once called "the romantic infrastructure" of the colleges as places of learning.

One more area of suspicion must be noted: since the publication of the White Paper with the ironic inclusion of "expansion" in the title, the *actual* effect of sharp economies in higher education, both in terms of institutional and student support and the flattening of student demand, has combined with deep concern about the *potential* effect of a decade of persistently low birth-rate.

Undoubtedly many degree-granting institutions are anxious about a situation in which new courses are validated when existing ones fail to recruit: for example, approval of 20 new modern language degree courses may result in the majority failing to become viable. Colleges may quite understandably, if wrongly, assume that such considerations may cause validators to be tougher now than before.

Finally, colleges have been going through a period of major reorganization at the most difficult time in the postwar history of higher education. In the early days, the CNAA was clearly very rigorous in its examination of polytechnic courses, and major resource conditions were attached to its approval of their courses. Painfully but successfully they established the very high reputation now attaching to CNAA degrees. Currently, however, demands for major resource inputs of staff or equipment cannot be achieved in the short-run: thus colleges would prefer an extended dialogue to a once and for all judgment.

Examples can be quoted to sustain the image of the Council that one encounters in some colleges. However, the image is still more of a caricature than a reflection of what is a much more complex reality. Far from being remote or unconcerned, the highly effective, experienced and consistently overworked officers of the Council have given much time to consultation with colleges, although the initiative for proposals must always lie with the colleges themselves.

Members of the Council's committees and validating parties come from both the universities and from colleges in the public sector, and operate unpaid in the service of that "advancement of education" described in the Charter. Their membership of the Council will require them to spend many hours travelling the length and breadth of the United Kingdom weighed down, literally, by volumes of complicated degree proposals.

Again, many are overworked but remain broadly representative of the differing approaches to higher education in the fields which they are asked to consider. Thus, many tutors from colleges of education are now involved in BEd visits and will be in other fields when they are established.

Many of the criticisms of the colleges could therefore be met by a substantial increase in the staffing and support which the Council merits in order to carry out its greatly enlarged task with the sensitivity and care that has always been its aim. The Council would clearly like to spend more time on counselling and guidance and in establishing different approaches to validation. Their recent discussion paper entitled *Partnership in Validation* also demonstrates a move towards thinking more about the nature of institutions offering degrees as opposed to a concentration simply upon looking at separate courses.

These developments are mainly intended for institutions which have a long tradition of work with the Council, but the new perspective involved could be helpful in considering those institutions coming into the Council's orbit for the first time.

It would, however, be false to assume that all that is needed is more time and more money. The story of the relations between the Council and the colleges reflects a deeper crisis of confidence about the whole organization of higher education in the United Kingdom. The crisis is not just a reflection of our economic troubles, although these have made it more acute.

The "reorganization" of the colleges is an unfortunate illustration of the failure to articulate *educational* goals which can be understood by those in the system and those for whom the system exists. In the educational policy vacuum which has followed the often brilliant but *how* unworkable White Paper, familiar imperatives of short-run economic and political advantage take precedence over educational arguments.

Thus dangerous divisions can grow up between those who should be working in partnership to advance higher education: the Department of Education and Science, the LEAs, the CNAA, the UGC and higher educational institutions. Currently almost every issue divides such bodies at some point. None of the interest groups has the whole answer, but it is now urgent for all of them to come together to establish priorities and a much more realistic working relationship.

An independent higher education commission of experienced educationists and administrators, fully serviced and sitting for a year, could do much to concentrate public attention. The issues must be considered at all levels, particularly within the field of higher and further education itself. There is a great need to restore confidence and to give genuine shape to what must be a national service.

An attempt to achieve such a definition should, of course, include the current emphasis upon diversity of institution and, indeed, may enhance it. Vital issues such as devolution, financing, regional control and the role of institutions all need urgent attention.

At the end of the CNAA Charter are the charming words: "Our Royal Will and Pleasure is that this Our Charter shall ever be construed benevolently." Such a condition is, however, unlikely to flourish until the political, economic and educational tensions current in higher education are confronted by the major partners in the enterprise.

James Porter

The author, a member of the James Committee, is principal of Bulmershe College of Higher Education, near Reading. He is a member of both UGC and CNAA committees.

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Birmingham

Research associates: S. W. S. McKeown (physics); M. A. Hordon (civil engineering); B. D. Kirkcaldy, F. Yates (psychology); M. D. Richardson, J. A. Davies, E. Glib (microbiology); K. W. F. Howard (geological sciences); W. C. Kenny (mechanical engineering); D. W. Smith; T. M. Scanlan (social medicine); J. B. Matthews (experimental pathology).
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Lecturers: R. N. Gwynne (geography); I. C. Murray (conservation); P. L. Williams (social medicine); P. L. Williams (social Colliquial assistant; T. von Bremen (German).

Bristol

Policy adviser: Sir James Jones (School for Advanced Urban Studies).

Heriot-Watt

The following members of staff have been appointed by senate to serve on the joint consortium for the next three years: Dr C. W. Davidson; R. J. Gray; G. A. Hook; Professor I. S. Melville; the Rev T. H. Scott; A. A. Wedderburn.

Liverpool

Senior lecturers: P. E. Boulton (haematology); L. Adamson, A. A. A. Zurek (general practice); I. W. McDicken (pathology). Temporary senior lecturer: M. A. Ansari (psychology); A. Maltray (radio-diagnosis). Lecturers: F. G. Austin (English language); B. S. Hammond (English literature); M. J. Wyatt (French); T. Scott (medieval history); A. M. Mortimer (botany); P. H. Leng (computational and statistical science); K. (Miss) Goodger; C. S. Smith (child health); A. Williams, M. L. Chance (parasitology); M. J. Serlin (pharmacology and therapeutics); S. A. Ward (physiology); A. K. Suri, N. Theofilopoulos (psychiatry); I. D. Harrison (surgery); J. Brady (operative dental surgery); J. Driscoll (industrial studies); P. W. J. Butey (civic design); D. T. Chester (geography); J. V. Femia (political theory and institutions); K. Stenning, G. F. Wagstaff (psychology).
Temporary lecturer: G. Glesaken (Greek). Research associate in lecturer: P. R. Baker (surgery). Demonstrator to nuclear physics research fellow: J. R. Cresswell (physics). Assistant librarian to senior sub-librarian: F. M. Thomson.

Newcastle upon Tyne

Reader: A. Allen (physiology). Visiting professor: Dr M. Jones (neurology); F. J. M. Laver (social implications of computers); Professor S. K. Ramgarajan (physical chemistry). Lecturers: B. E. Argent; M. W. Marshall (physiology); U. Singh (anatomy); M. R. Harrison (medicine); A. S. Dickinson (atomic physics). Temporary lecturers: P. D. Lewis (language centre). Principal research associate: H. Shinagawa (biochemistry). Senior visiting fellow: D. Lomot (computing).

Warwick

Reader: W. Righter (English). Lecturers: C. Barker (theatre studies); A. I. Fletcher (English literature); N. Glassbury (applied social studies); L. S. Lustgarten (law); D. R. Rutter (psychology).

Wales

Senior lecturers from October 1975: Dr C. E. S. Davies; Dr M. D. Davies (zoology); D. E. James (agricultural botany); D. Law (economics); J. Ogden (English); R. Purssell (international politics); P. V. Saunders (botany and microbiology); R. C. Whaley (geology). Senior lecturers from October 1976: J. Glynne Evans (music); Dr J. R. Hinchliffe (zoology); J. Wyn Griffith (physical education); Dr D. Rivards (Welsh); Dr. B. S. Schlenker (history); Dr P. I. S. Williams (physics).

Aberystwyth

Temporary lecturer: J. A. Dunn (Russian). Lecturers: R. Williams (law); the Rev. I. Bythin (religious studies). Director: W. Davies (extramural studies).

York

Research fellows: C. N. Martin (biology); B. S. Ramaghan (chemistry). A. Walker (social and economic research). Research assistants: N. G. Nice, G. Smith (biology). Organizing director: B. Green (language). University organist: P. Seymour (music). Assistant archivist: R. N. Swanson (Borthwick Institute of Historical Research).

Chairs

Dr John Colley, reader in paediatric epidemiology, London School of Hygiene and Tropical Medicine and Honorary Consultant in clinical epidemiology, Hospital for Sick Children, has been appointed to the chair of community health, South-West Regional Health Authority.

Dr Angus Stewart Deaton, research officer, department of applied economics, and fellow and director of studies in economics, Fitzwilliam College, Cambridge, has been appointed to the chair of econometrics, Department of economics, University of Bristol.
Mr Ralph Crowe has been appointed to the chair of architecture, University of Newcastle upon Tyne.
Dr M. B. Andrieyes, senior lecturer, in Business Policy, London Graduate School of Business Studies, has been appointed professor of business administration, University of Strathclyde.
Professor C. McDonald, professor in the department of epidemiology and health, McGill University, has been appointed to the chair of occupational health, London School of Hygiene and Tropical Medicine from July 1, 1975.
The title of Professor of the History of Technology of Art has been conferred on Mr S. Rees Jones, Courtauld Institute of Art, from April 1, 1975.



"Sword and Sorcery" is an exhibition of illustrations, books, comics, prints, and magazines dealing with horror fiction from the start of the century to the present day. It has been organized by Wolverhampton Polytechnic and is on display in its faculty of art and design until November 29.

Forthcoming events

The Oxford University department for external studies are holding a weekend conference on "The Archaeology of Monastic Sites" from January 2-4. Application forms from: The Director, Oxford University Department for External Studies, Rewley House, Wellington Square, Oxford OX1 2JA.

* * *

A conference on Electrical Safety in Hazardous Environments has been organized by the Institution of Electrical Engineers (to be held at Savoy Place from December 9-11. The conference is the second in a series which aims to examine new electrical safety techniques in industries such as mining with potential explosion hazards. Registration forms from: IEE Conference Department, Savoy Place, London WC2R 0BL.

* * *

Oxford University Department for External Studies, Rewley House, Wellington Square, Oxford OX1 2JA. Application forms from: The Director, Oxford University Department for External Studies, Rewley House, Wellington Square, Oxford OX1 2JA.

* * *

A conference on socio-legal studies will be held at the Middlesex Polytechnic on December 2. Conference fee £3. Send cheque or postal order, along with name, address and student's institution, to Dr S. Jay, Centre for Socio-Legal Studies, Middlesex Polytechnic, Hendon, London NW4 4BT.

* * *

Dr Ralph Crowe, reader in architecture, Newcastle University, will be holding a lecture on Alarms and excursions: an illustrated talk about music from Shakespeare's plays in the modern theatre on November 25 at 1.30 pm in the Chemistry Lecture Theatre, Queen Mary College, Mile End Road, London E1 4NS. The speaker will be Guy Woolfenden, Music Director, Royal Shakespeare Company.

* * *

The Thames Polytechnic Chemistry Teachers Centre has arranged an open meeting on "Careers in Chemistry," on December 3 at 3.30 pm. It is intended for sixth formers as well as teachers. A panel of speakers will answer questions. Details from: Dr B. S. Furniss, Thames Polytechnic, Wellington Street, Woolwich SE18 6PF.

* * *

"Prediction and Theory in Film and Television Studies", a series of seminars organized by the department of general studies at the Royal College of Art. These will be followed by photography in the spring and painting in the early summer. The seminar will be held at the RCA, Gulbenkian Hall, Kensington Gore, London SW7, from November 27-28 at 2 pm. Applications from: General Studies Secretary, Royal College of Art.

* * *

What the Censor took from Dr Fanshawe" a lecture to be given by Professor W. Speaight, professor of English literature, University of Sheffield, will be held at the Curtis Auditorium, School of Physics, University of Newcastle upon Tyne, on November 27, at 5.30 p.m.

* * *

"Women and Women Writers in the Commonwealth", an exhibition of over 800 books displayed at this year's Commonwealth Book Fair, from November 17 to 28. The exhibition is on at New Zealand House, Haymarket, London SW1.

Obituaries

Professor Lionel Trilling, University Professor Emeritus at Columbia University, died in New York on November 5 at the age of 70. He was one of the finest American literary critics of his time.

Professor R. C. Wolfenden, professor of public health at Bristol University and for many years medical officer of health in Bristol, died on November 7 at the age of 61. He was one of the best known medical officers of health in the country and took particular interest in the development of health centres.

Professor N. C. Scott, emeritus professor of phonetics at London University, died on November 8 at the age of 76. He was head of the department of phonetics and linguistics at the School of Oriental and African Studies, from 1960 which he held until his retirement in 1966.

Grants

Universities

Aberdeen

Political Economy—£16,677 from the SSRC for an investigation into the changes in salary levels and structures in the postwar period, under the direction of Professor D. I. MacKay and Mr R. F. Elliott.

Birmingham

Educational Psychology—£6,240 from the SSRC for research into the effect of presentation, rate semantic structure and children's ability on listening comprehension, under the direction of Dr R. J. Riding and Mr R. D. Lambourne.
Economic and Social History—£1,018 from the SSRC for an investigation into unemployment in Britain between the wars, under the direction of Dr W. R. Garside.

Bristol

Education—£5,996 from the SSRC for research in children learning to read, under the direction of C. B. Wells and Mrs E. B. Raban.

Cambridge

Psychology—£27,997 from the SSRC for a study into the aspects of early parent-child relationships, under the direction of Dr M. P. Richards.

Cambridge

Engineering—£15,000 from the SSRC for research in learning to solve problems in engineering, under the direction of D. L. Marples, P. J. Simpson and P. D. Matus.

East Anglia

Applied research in education—£28,636 from the SSRC for a study in the dissemination of action research.

Edinburgh

Social administration—£2,610 from the SSRC for research in adult perceptions of foster and biological parent care experiences, under the direction of Dr J. P. Triseliotis.

Essex

Economics—£4,522 from the SSRC for the development of a versatile econometric package, under the direction of Mrs R. P. Kulkukuaratchy.

Exeter

Chemistry—£30,000 from the SRC for the purchase of a Fourier Transform Nuclear Magnetic Resonance Spectrometer.
Geography—£5,945 from the SSRC for research of landscape protection and development control policy.

Hull

Geography—£2,304 from the SSRC for a study of centrifugal processes in the distribution of urban retailing under the direction of Dr M. T. Wild.
Health studies—£37,991 from the SSRC for an investigation into the decentralized national health service.

Keele

Psychology—£14,322 from the SSRC for a study in typographic decision-making and the design of instructional text under the direction of Dr J. Hartley and Mr P. Burnhill.

Leicester

Education—£89,523 from the SSRC for an investigation into the nature of classroom learning in the primary school and related studies.

Liverpool

Pharmacology and general therapeutics—£17,141 from the Wellcome Trust for work on clinical aspects of drug metabolism, under the direction of Dr Michael Orme.
The following grants have been awarded by the university by the SRC: computational and statistical science—£11,320 in support of research into the experimental software testbed for numerical algorithms.
Organic chemistry—£7,750 in support of an investigation into the biosynthesis of the isocyclic ring in chlorophyll A and bacteriochlorophyll A.
Mechanical engineering—£8,203 in support of research into creep to fracture in dispersion hardened metals.
Physics—£80,000 in support of their film analysis project; £87,524 in support of their nuclear structure programme.
Inorganic, physical and industrial chemistry—£2,372 in support of an electron probe study of order-disorder and related phenomena in alloys; £6,350 in support of research into the insertion of cyclopropane and its derivatives into platinum hydrogen bond; £6,675 in support of a survey of boron-substituted adamantanes.
Biochemistry—£7,858 in support of an investigation into electron transport and energy-linked reactions in chloroplasts fritsch undergoing nutritional transitions.
Botany—£8,758 in support of genetic studies on copper tolerant agrostis tenuis sibth.

London

Chelsea College
Monitoring and Assessment Research Centre—Professor C. Goodman, £146,500 from Scientific Committee on Problems of the Environment and £75,000 from the Rockefeller Foundation for research and development in environmental monitoring.
Mathematics—Professor G. M. Bell, £7,150 from the SRC for a study on the theory of critical phenomena in lipid systems.
Chemistry—Professor D. Chapman, £5,155 from Ministry of Defence, for study on CNS drugs and lipid membrane behaviour, £2,640 from the Nuffield Foundation, for a study of the physical chemistry of drug action.
Pharmacy—Professor E. J. Shellard, £3,600 from Laboratories for Applied Biology Ltd towards research into plants of potential medicinal interest.
Sociology and Psychology—Professor R. A. Pinker, £2,039 from the Centre for Environmental Studies for theoretical and practical implications of participation in Council Housing Management.

King's College

Geography—£5,839 from the SSRC for a study of the migration decisions of individuals at retirement under the direction of C. M. Law and Dr A. G. Warnes.

Loughborough

Ergonomics and Cybernetics—£4,200 from the SSRC for a study of decision-making difficulties in multinational control situations.

Newcastle

Geography—£18,998 from the SSRC for research into the spatial impact of shopping centre schemes, under the direction of Dr R. L. Davies.

Nottingham

Community Health Medical School—£24,727 from the SSRC for research into socio-medical measures of health in primary care, under the direction of C. J. M. Martini and I. W. McDowall.

Oxford

Oxford Enzyme Group—£223,500 from the SRC for the continued support of the Oxford Enzyme Group under the chairmanship of Dr R. E. Richards.
Nuffield Department of Surgery—£154,475 from the MRC for research on the immune responses and the specific suppression in renal transplantation under the direction of Professor P. J. Morris.
Physical Education—£9,750 from the Leverhulme Trust for a study into the alleviation by physical exercise of the effects of mental stress.
Chemistry and Applied Chemistry—£21,770 from the MRC to support a project entitled "Prostaglandin antagonists", under the direction of F. Scheinmann and Dr R. L. Jones.
Electrical Engineering—£6,264 from the SRC for continued research on a project entitled "Community noise due to road traffic noises", under the direction of Dr N. S. Yeowart.
Mechanical Engineering—£12,860 from the SRC to support a project on wear and erosion resistant coatings by reactive ion plating, under the direction of Dr D. W. Wakeman and Mr P. Teer.

Sheffield

Economics—£5,985 from the SSRC for research of a dynamic simultaneous model of structure-conduct-performance relationships for United Kingdom manufacturing, under the direction of A. J. Buxton.
Criminology—£7,640 from the SSRC for a survey of attitudes and experience of crime in contrasting areas.

Sussex

Social psychology—£3,943 from the SSRC for an investigation into the cognitive aspects of social facilitation effects.

York

Biology—£1,263 (supplementary) from the ARC for a study of the ecology of fasciolasis.
Chemistry—£3,197 from the SRC for a study of atom transport in inorganic solids using pulsed NMR; £46,000 from the SRC for a study of resonance raman spectroscopy of reactive free radicals in solution.

Open University programmes November 22 to 28

Sunday November 23

BBC 2

12.15* Science foundation course. Film and Dreamphile (R100 page 6).
12.40* Uses your head TV. What's in mind was the word.

RADIO 4 (VHF)

9.30* Science foundation course. Motion unit 6.
9.55* Open Forum.

Thursday November 27

BBC 2

12.15 Use your Head V. Intelligence.
12.55 Open Forum.

Friday November 28

RADIO 3 (VHF)

18.10 European Economic Integration. Modelling for a Common Law. Open Forum. 18.30 Decision Theory. The Paradox. 18.55 Philip Larkin.

* repeated programme

Noticeboard is compiled by Patricia Santinelli and Myrna Mansuate

THE UNIVERSITY AND ITS ENEMIES

Three further contributions to the debate on Paul Johnson's articles about the state of universities

Is knowledge ideologically neutral?

Paul Johnson argues that the historic function of the university is the pursuit of knowledge. On this basis, he suggests that universities should be run by those who know most about knowledge, namely academics, and that those who would interfere, distort or destroy their function, which he sees as the state and the left within the universities, should be kept out. What of the relationship between the universities and the state? Many of the dangers which Johnson points to in his second article are very real. The state's concern over the recent period has increasingly been to technocratize the universities—along with the rest of higher education. Thus, the present Government's efforts are directed towards making the universities cheaper, more pliable, more teaching-orientated and more vocational. In short, the universities are to be rationalized in a more drastic fashion to the needs of the state and big business.

To the extent that this means a reduction in educational standards and a truncated conception of what education is all about, Johnson's attack is indeed to be supported. The attempt to shape higher education in terms of the narrow needs of the state and big business must be resisted. But what is Johnson's solution? Basically, he advocates a return to the liberal university—free from state interference (and, in effect, segregated from other areas of higher education). Here his approach seems to me to me ahistorical and ostrich-like.

A new relationship between the universities and the state is necessary and inevitable because the function of the universities (along with the rest of higher education) has changed irreversibly over the last two decades (notwithstanding the decline of triumphalism). Firstly, they have become an important factor in the supply of skilled labour and, secondly, much of their research is now closely linked to the needs of industry and the state. Indeed, it is primarily these changes that have led, for example, to the expansion of the polytechnics and the present pressure on the universities. The question, therefore, is not whether a new relationship between the state and the universities is necessary: rather, it is what the relationship should be. The answer lies neither in the state's efforts to castrate the universities nor in Johnson's own utopian pipe-dream of a return to the liberal university.

On the contrary, we must find a new solution for higher education as a whole which combines democratic accountability to society and the state, academic autonomy and freedom, and a unitary system of higher education (on the basis of "levelling-up"). This brings me to Johnson's tirade (the word is an understatement) against the left. This is both methodologically and intellectually the weakest part of Johnson's argument.

Here, the critical faculties are suspended: terms like "student fascist left", "aggro-fascists of the NUS" and "aggrodons", designed to excite rather than enlighten, are used with some abandon. Further, the position of the left is caricatured. Only a tiny minority, for example, would advocate a strategy of seizing the universities and polys by "physical force", while even the "red bases" theory, which Johnson cites, now commands very little support on the left. It is thus difficult to take these particular attacks on the left very seriously. Johnson, however, also presents a more substantial argument. Basically, he sees knowledge as something neutral and value-free. He therefore rejects marxism and marxists as introducing ideology and politics into knowledge. But is knowledge ideologically neutral?

Surely we are not still arguing about whether or not neo-classical economics, Namierian history, Leavisite criticism and Parsonian sociology contain ideological assumptions and implications. Clearly they do. Once that is accepted, marxism must be regarded as a valid alternative approach in intellectual inquiry. That, it seems to me, should be the stance not only of a marxist—but also of a liberal (as, I think, Johnson professes to be). The contrary position, indeed, is the height of illiberalism. From this, moreover, it follows that marxism—and marxists—are to be seen as an essential part of our universities.

It is necessary, therefore, to reject two of Johnson's central arguments: firstly, that universities (and higher education) can be autonomous along the lines of yesteryear and, secondly, that knowledge is value-free. It follows that we must also reject the notion that the universities are somehow "above politics"—and that "politics" should be kept "out of higher education" (as Johnson suggests). We now come to the question of university self-government—and notably the role of students. Here Johnson's view ultimately seems to rest on an extremely hierarchic concept of knowledge. Thus, the teaching process is, in effect reduced to those who possess the knowledge, the academics, the active agents, transmitting it to those who don't, the students, the passive agents. But surely students often—and should always—play an active rather than passive role in the teaching process: in other words, it should be seen as interactive rather than one-directional.

This is in no way to deny, of course, that academics should play the key role in relation to both teaching and internal self-government. Indeed, there is a problem here that Johnson really sweeps under the carpet. Universities have increasingly come under the control of a handful of top administrators and professors such that not only students but also the vast majority of academics are virtually excluded from large areas of decision-making.

Martin Jacques

The author is lecturer in economic and social history at the University of Bristol.

Central question concealed

I should like to get out of the way first the one thing about which Johnson is not just wrong but uninteresting: his blank association of the whole idea of student representation with such things as violence at the North London Polytechnic and the mindless NUS ban on certain speakers. There is no evidence for the claim that the sort of student representation measures introduced in many British universities encourage mob rule, intimidation and so forth, and the sensible idea that they can sometimes help to defuse threats of such things has not been made it clear why, on his view, they should. The failure of the "Research means higher GNP" argument has removed one recent basis. Johnson offers no other, unless it is to be found in his references to a (political) elite, in which case we are back with the other half of the argument.

Johnson's argument is literally reactionary, in that it tries to go back to an earlier situation in a way which ignores not only changes are likely to be, one glimpses an ambiguity which runs through his articles. Some of the time, most particularly when he is railing about their internal government, Johnson seems to imply a cloistral image of universities, of students as novitiates of scholarship. This seems to suit some of the pictures he invokes of the ideally deferential student listening to the ultimately dedicated professor.

Yet at the same time he seems to want the universities to be the training ground of an elite, and a proper objective of an elite's competitive spirit. But if the students are to be an elite, the university will not merely be the objective of that spirit, but a starting-place for it as well. It is not a very competitive or thrusting representative of a modern elite whose ambition is satiated by becoming Reader in Cuneiform Studies, excellent in itself and well esteemed in the university as that role should be. Rather, he will see the university as a place one goes through to somewhere else; and the question remains of why a scholarly cloister is the place that this warrior in a hurry should go through.

What Johnson seems mysteriously to have left out is that "elite" is a political and social concept. We can speak, loosely, of an elite among scholars, as we can of an elite among show-jumpers; but those who have spoken of universities as training an elite have not meant just that, but rather leaders of society. How does this, if universities are to have it, is to be combined with their being places of research and of the transmission of culture remains a central question. Johnson gives the impression of thinking that he has, controversially, answered that question. He has not; he has merely conceded it.

Many other questions are hidden with it. If we are concerned with elites in the strict, social, sense, then it is at least unrealistic to expect government and other central bodies to take only a benevolent and distant interest in what universities are doing, as a sceptical medieval baron might in a colony of poor friars. If universities are supposed, quite specially, to produce the public's leaders, there is a legitimate public interest in how they are produced. If, on the other hand, Johnson does not mean that universities specially do this, but merely that universities and their teachers are the elite *of the educational establishment*, then there is a question of why government should be interested in them at all, in particular in the matter of producing finance. Johnson assumes that government will continue, at a reduced level no doubt, to finance universities, their research and their students. But he has not made it clear why, on his view, they should. The failure of the "Research means higher GNP" argument has removed one recent basis. Johnson offers no other, unless it is to be found in his references to a (political) elite, in which case we are back with the other half of the argument.

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Bernard Williams

The author is Knightsbridge professor of philosophy at Cambridge University.

Returning to an awareness of the enemy within

An extended effort to review the present position of universities and propose ways for meeting their difficulties is a demanding thing. Paul Johnson has made this effort and deserves gratitude. It is good to bring a lot of detail together and to avoid feeble tu-ing and what used to be called "pi-jaw".

Against this we have evidence of tone, lapses into banality and treadiness (for example Johnson's recurrent use of this very word), chimiess in the positive suggestions, and a general sense that the author is not forward, at least with universities: I am inclined to wonder whether some of the articles have been lying in a drawer since the "Trendy Sixties" and have recently come out for some vigorous up-dating.

My own experience of student participation is not confined to Cambridge. When I was seconded as professor of English at Athens University (a very traditional university) from 1961 to 1963, I used to discuss freely with my senior students what would be a manageable workload for them and what sort of examination papers would be fair and worthwhile.

At first, true enough, they simply could not believe their ears. Then they almost immediately made great progress in more ways than one. In those difficult circumstances, it made simple sense.

To say that "power-sharing with students has proved a destructive failure" is, as a generalization, a destructive failure. Sweeping remarks about "dismantling" consultative and joint decision-taking machinery play into the hands of those who are interested in universities only as bases for extremist political action.

On the whole, I think one must allow that any institution for higher learning may, at the present time or in the future, become a target for calculated extremist political action. To say this is not fatalistic, because the detailed

many are still ready, even anxious, to get carried away by such remarks and make themselves contemptible.

Nevertheless, one has to remember that even the Israelis relaxed their vigilance, even on Yom Kippur. One can not believe it, but it has happened. An institution should ever quite forget that possibility.

By now, however, we can surely see that once surprise is lost (as it has been) such a takeover operation must prove exceedingly difficult. Nearly all the advantages are on the other side.

Johnson says nothing of the crucial difficulty. For the last, and decisive, defence against an extremist political takeover would be the closing of an institution by Government: but no institution could support the enabling legislation for such action because a political threat is as likely to come from Government as from inside.

A university that was in fact being destroyed from within would have to rely on adequate government action being envisaged and taken ad hoc, and perhaps even without official advice from the threatened university itself. My opinion of most politicians is low—they seem just so stupid—and I recognize this as ultimately a weak spot. But my knowledge and experience of politicians are limited.

Johnson writes: "It may seem strange for academics to regard themselves as in the front line defending civilization..." I thought we all took this for granted. He himself does not seem to see what it means.

Civilization as we have it is not defended by "power diffused among groups of experts" and "decisions ... taken by those who know most about it". The "overwhelming argument for the greatest possible variety of ... approaches" means free, many-sided, continuing debates that include a full place for the expression of relevant extremist opinion.

I know, of course, that running a large institution on those lines calls for a certain kind of tightrope act. Certain academic or academic-administrator posts carry high salaries precisely in order to obtain the qualities of mind, and will, that they call for.

The enemy Johnson knows nothing of is the enemy within universities: those who obtain and accept positions of high responsibility when they are just not up to the job. Here, of course, one is not disposed to expatiate on examples from any period of one's own experience; and my experience is doubtless incomplete.

I have had a few glimpses of how steady, sober men can begin to collapse into a kind of radicalizing hysteria, but the only real case of academic hysteria and moral disorientation I have ever witnessed was a reactionary case.

But decisive failure that comes short of that—elaborate administrative procedures solemnly proposed in unawareness of how they could bring the roof down about one's ears, a chronic and absurd desire to withhold harmless information and so put everyone's back up, and what I called, in a poem I wrote back in 1965, with an academic context directly in mind (though I did not say so), the "colic *no* and costive *yes*" view-of-life.

It does not quite do so because much the same, or worse, holds everywhere. A highly advanced, civilized society (those adjectives invite much discussion) rests on patterns of organization that seem in fact to be simply beyond nearly all of us—as well, I suspect and hope, as being profoundly alien and repugnant to what most makes us men, makes us human.

One is not afraid, surely, of the Crowther-Hunts of this world. The very measure of truth in the misty slogans they trade in (university research should be "geared to economic and social needs" and so on) means that unless there is a fundamental change such as would transform the whole political life of the country, their interference in university affairs—though doubtless increasing—will remain limited, largely ineffective at the real focal points, and not totally adverse in effect anyway.

Not that I want to be misunderstood. I dislike intensely much of what politicians orate about universities. I agree that the University Grants Committee is on the slippery slope, and if anything, scrabbling downhill on its own experience; and my experience is doubtless incomplete.

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John Holloway

Dr Holloway is professor of modern English at Cambridge University

American news

Government rule leading to 'new purgatory'

from Michael Binyon

WASHINGTON

Government interference is now so destructive and Federal and State bureaucracy so mindless that American colleges and universities have become "a new purgatory, right here on earth", according to a leading education journal.

Universities are now expected to operate like State highway departments and civil rights enforcement agencies. The consequences will be bitter disappointment and institutional heart failure, says an editorial in *Change* magazine.

"As Government generally has become less efficient and more intimidated even the most liberalizing legislation has been metastasized into a series of mindless enforcement and regulatory proceedings that could have come out of *Alice in Wonderland*", *Change* says.

It illustrates the "dimensions of the calamity". This year's cost to higher education institutions of Federally mandated programmes is estimated at $2,000m—equal to the total of all voluntary giving; some Government agencies, playing cat and mouse with colleges, give them as little as a week to comply with regulations; in one State payment voucher applications were rejected because a college folded them wrongly; in another a governor and his staff had a line-by-line veto power on university budgets; one State university had to spend $8,000 advertising for each new vice-president.

Change says a growing number of Federal guidelines are impossible to comprehend. Even a $50,000 grant can have attached to it 100 pages of applicable regulations, which change from year to year.

Recently the Health, Education and Welfare Office told colleges they could claim $373m in grants under a section of a Public Works Act, but hardly any college heard of this until the deadline had passed.

Some independent colleges have refused Federal funds for fear of Government interference, but since October even independent colleges are defined as Federal recipients if any student gets a Government grant.

Brigham Young, the Mormon University in Utah, has challenged Federal guidelines on sex discrimination, and publicly said last month it would not follow those that interfere with the teaching of moral principles. The trustees said HEW had no right to judge the sincerity of the university's religious tenets.

Some bureaucracy *Change* calls ludicrous. Guidelines for helping the handicapped require colleges to arrange "sensitivity sessions" for all employees. The University of Illinois built a new walkway with a railing required by a new safety regulation. But the railing was 37 inches high instead of the prescribed 42 inches. The university says it would cost $24m to replace this and other details such as toilet seats to meet the regulations.

"The cost of bureaucracy has embittered colleges. At a Federal level more than 100,000 people are employed writing and enforcing the regulations, and the number of Government forms, according to one estimate, has risen to 5,146. The total cost of Federal programmes is $130,000m a year—over three times that spent on all post high-school education combined.

Alaska tops funds league

from our own correspondent

WASHINGTON

Alaska spent more than six times as much on higher education as New Hampshire this year, and in the past two years has increased its spending by 126 per cent, according to a survey of all 50 American states.

Altogether State legislatures in the United States have appropriated more than $12,500m for higher education's operating expenses this year, 28 per cent more than two years ago.

The two States that top the table are Alaska and Hawaii, with Alaska spending $170 a person, a figure partly explained by the substantial funds invested in courses related to energy and oil exploration.

On average, States are to spend $60 a person this academic year. Those States spending more tend to have small populations—Alaska, Hawaii, Wyoming, Washington, South Carolina, North Dakota, Idaho, Arizona, Colorado and Utah were the top 10.

At the bottom are New Hampshire, Massachusetts, New Jersey, Tennessee, Ohio, Maine, Vermont, Connecticut, Missouri and Oklahoma.

Taking inflation into account, several States will spend considerably less in real terms this year than they did in 1973. New Hampshire is a poor State, but both New Jersey and Massachusetts have fairly substantial personal incomes and some of America's most prestigious universities are in States at the bottom of the table.

The figures, prepared annually by Professor M. M. Chambers of Illinois and published in the *Chronicle of Higher Education*, show that over the past 10 years the sums set aside by States for higher education have gone up 312 per cent.

However, in the past two years alone inflation has been 21 per cent, and there was a 12 per cent rise in enrolments.

The division of funds shows that generally two-year community colleges were getting bigger increases than the four-year State colleges and the larger State universities.

Two advisers for Ford

The Ford Administration has hired two advisers to keep President Ford abreast of the latest developments in higher education.

One of them is Mr Robert Goldwin, a former college administrator who, as a special consultant, sees his job as keeping Mr Ford up to date on what academics are thinking.

He organizes seminars with four academics, four Administration officials, Mr Ford and himself. Five of these seminars have been held so far, and have lasted up to three hours. They have been on a wide variety of subjects, all of which have been suggested by Mr Goldwin.

The other adviser is Mr David Lissy, who has joined the Domestic Council which advises the President on domestic affairs. Mr Lissy's job is primarily to keep in touch with all the educational groups in Washington and inform the President of their activities.

Controversy as Angela Davis gets job

from Ian Anderson

STANFORD

Black activist Angela Davis has resumed a formal academic career in California after an enforced break of six years. However, sections of her new college are unhappy with her appointment.

Miss Davis, 32, lost her position as assistant professor of philosophy at the University of California-Los Angeles in 1969 because of her communist affiliations. After lengthy court battles she failed to regain her position.

She has been appointed to teach a series of weekend classes on "Black women and the development of the Black community" at Claremont College in southern California, a system of colleges with a conservative reputation.



Angela Davis.

Miss Davis was appointed to the position by the man who was later dismissed as director of the Black Studies Centre at the colleges. Claremont officials have claimed that they were not informed of the director's intention to appoint Miss Davis. They also say that the appointment was made to embarrass them. Claremont's governing body voted to withdraw the offer, but the contract had already been signed.

It has been reported that alumni and other donors threatened to cancel endowments to Claremont following announcement of the appointment.

Language learning drops sharply

Fewer American undergraduates were enrolled in foreign-language courses last year than in 1972. According to a survey by the Modern Language Association covering practically every college and university in the country, foreign language enrolments dropped by 6.2 per cent between 1972 and 1974.

Enrolments fell most sharply in German (by 14 per cent), French (by 13.4 per cent) and Russian (by 11.6 per cent). There was only a slight drop in enrolments in Spanish and Italian courses, while enrolments increased in unlikely quarters. In Greek courses, for example, it was up by 5.8 per cent, in Latin by 3.3 per cent and in Japanese and Arabic by 7.7 per cent.

The MLA attributes the overall enrolment decline to the growing proportion of institutions that have dropped foreign-language requirements. This proportion has increased from 18.9 per cent in 1970-71 to 38.8 per cent in 1974-75.

Aid for refugees

Forty-two displaced scholars, formerly professors in South Vietnam or Cambodia, have received awards amounting to $360,000 from the Ford Foundation.

Some awards will make it possible for research to continue that was begun before the scholars fled their countries. Others will support studies on the progress of the Vietnamese and Cambodian refugees since their arrival in America.

Union sets out dismissal code

The cutbacks in university budgets throughout the United States and the scrapping of courses by colleges in economic difficulty are threatening the jobs of so many lecturers that the American Association of University Professors has drawn up a code of conditions for dismissing staff in times of financial exigency.

The new AAUP code argues that tenured contracts can be ended "under extraordinary circumstances" only if all alternatives have been exhausted. Responsibility for identifying those who are to lose their jobs should be given to a committee designated by fellow lecturers. Proper notice should be given and a threatened lecturer should have the chance of a full hearing.

The lecturer may insist that the administration prove the existence and extent of the financial difficulty; that it is dismissed the institution will not at the same time make any new appointments or renew fixed term contracts; that he receive proper severance pay; and that his place will not be filled for three years unless he had been offered the chance to go back.

Courses may be scrapped essentially only on educational considerations. These do not include consideration of variations in enrolment. Lecturers should be offered alternative jobs, if the institution should be ready to pay for their retraining.

Record enrolments confound doom and gloom forecasts

from Angela Stent

CAMBRIDGE, MASS.

A record number of students have enrolled in colleges this year, despite the rising costs of higher education and the growing questioning of the value of college degrees.

The National Center for Education Studies reports that more than 10m freshmen enrolled this autumn, an increase of 3 per cent over last year.

The increase is not confined to any particular group of colleges—private, public, two-year, four-year, women's and black colleges all report increases in registration figures.

This is the second year in a row that enrolment figures have contradicted pessimistic forecasts of declines that threatened to exacerbate the financial problems of higher education. The gloomy forecasts were based on the premise that the widespread publicity given to unemployment among BA holders and the declining birth rate would lessen the number of college students.

The National Council of Independent Colleges and Universities reports that, of 800 private institutions surveyed, 58 per cent have a higher enrolment than last year and 62 per cent have more new students. Only 15 per cent reported a drop in total enrolment and 14 per cent a decline in new students.

For instance, Harvard enrolled 1,600 freshmen out of 11,000 applicants; Yale 1,346 out of 9,331; and Princeton 1,137 out of 9,962. In many of the more prestigious private colleges applications far exceeded the number of places available, despite the $6,000 a year tuition fees and room and board costs.

A few years ago, when many all-male colleges began to open their doors to women, it was predicted that women's colleges would slowly fade away. The enrolment figures contradict that view. The Women's College Coalition reports that enrolments are the highest in four years—a significant reversal of an earlier downward trend. More than half of the colleges surveyed reported gains in freshman registration.

The same phenomenon has occurred on black campuses. Enrolments at some black colleges are up by 50 per cent. Educators attribute this to the growth of the black consciousness movement, the fact that white colleges are not recruiting blacks as aggressively as they used to, and the improvement in student aid which in some black institutions goes to 90 per cent of the students.

The growth in enrolments has been attributed to a variety of factors. The difficulty of finding jobs on graduation and from high school has certainly encouraged more students to go to college.

Recruitment techniques have also become more intense and sophisticated; for instance, Milligan College in Tennessee is offering its students $50 for each additional student they recruit for the college.

And Federal Government assistance to students—in the form of grants, subsidized loans and subsidized jobs—comes to about two billion dollars a year. State aid comes to another half a billion, and the institutions provide half a billion themselves.

However, campus administrators concede that rising enrolment will not by itself solve their financial problems. Many colleges are deliberately keeping down their numbers to avoid extra expense.

Axe poised over faculty jobs in New York

from Thomas Cahill

NEW YORK

The City University of New York, clutching a purse at least $60m poorer for the spring semester, is faced with the necessity of doing radical surgery on itself by the first of January. The need to decide what—and who—will be destroyed is now producing intra-mural conflict on a monumental scale.

The Board of Higher Education, which must ultimately make the decisions, is doing nothing. Members of the board, representing various pressure groups and special interests within the city, are paralysed by their political debts and unable thus far to reach a consensus on any proposal. "They are coming apart at the seams", said one highly placed observer.

Their paralysis does not, however, prevent them from accusing one another of irresponsibility—even at open meetings with thousands of protesting students present. Nor does it prevent their chairman, Mr Alfred Giardino, from complaining bitterly and often that the lack of any plan is the fault of university chancellor Robert Kibbee and his staff.

But Dr Kibbee has produced a plan, calling for a 20 per cent reduction in the university's scope (*THES*, October 31). This plan, however, does not confront squarely the obvious necessity of naming the colleges to be closed.

Dr Kibbee's relationship to the presidents of CUNY's 20 colleges would make that almost too painful. The Board of Higher Education, on the other hand, could not even agree at its last meeting to undertake a study of a possible programme of "consolidation and elimination".

Into this vacuum Dr Robert Marshak, president of City College (CCNY), has ventured with a list of six colleges ripe for the axe—none of them his own. This "grandstand play", as it has been called in one of the few printable descriptions of Dr Marshak's action, has been greeted with general horror, especially by CUNY faculty.

Another recommendation frowned on by the faculty, but frequently voiced by administrators, is the dismissal of an additional 1,500 full-time faculty members. Many faculty members, however, seem unable to believe that their livelihoods are actually threatened.

It seems inevitable now, whatever happens, that more faculty will be dismissed, that at least three colleges will be closed and that CUNY's celebrated policy of "open admissions" to all New York city high school graduates will be significantly curtailed. The only question left will take responsibility for wielding the axe.

Blacks urge big Federal boost

The presidents of 100 black colleges and universities have proposed that the Federal Government commit itself to achieving "parity in education" for black college students within the next 25 years.

The educators have presented a report, *Year 2000 Plan for Parity in Education*, to Dr F. David Mathews, Secretary of the Department of Health, Education and Welfare (HEW).

Prepared by the National Association for Equal Opportunity in Higher Education, the report contends that, though black college enrolment has increased significantly in the last few years, white enrolment has grown at an even faster pace. Thus the proportional difference between black enrolment and white enrolment has been growing.

The report recommends large infusions of Federal funds for black institutions, an increase of black representation on HEW's committees and advisory boards of higher education in the various States.

Though blacks make up about 11 per cent of the population, they account for little more than 2 per cent of the country's doctors, lawyers and engineers, and about 3 per cent of the PhDs.

Israel

New deal for nursing and teaching

from our correspondent

JERUSALEM

Two of the Cinderellas of tertiary education—nursing and teaching—have received a boost as a result of decisions taken by the Council for Higher Education.

Hitherto, certified or registered nurses have been trained in post-secondary three-year schools for nurses, and the output has never matched the demand.

Answering a two-fold plea that modern sophisticated medicine requires sophisticated nurses and that more and better candidates will be attracted to the profession if it opens the gates of the university to them, the council has authorized the School of Medicine of the Hebrew University in Jerusalem to open a four-year BSc degree course in nursing.

The fact that the new course is in the hands of a veteran recognized university and that it will require an extra year, will, it is argued, guarantee that it will produce better qualified nurses. It is not clear, however, whether it will produce more nurses.

At the back of the minds of the promoters of the new course is the gradual phasing out of the three-year post-secondary non-university course in favour of the four-year academic course. The directors of the new course insist that it will include all the chores that are the lot of the three-year students. Initially, there will be between 24 and 30 students.

The council, with typical caution, has decided that the new academic course will be limited to the Hebrew University Medical School and will not be taken up by the medical schools in other universities.

The Tel-Aviv University Medical School has a three-year BA course in which one of the major subjects is nursing. Candidates have to be registered nurses. The aim of the studies is to prepare the registered nurses for leading positions in nursing practice, service and education.

Teacher training is more complicated. Secondary school teachers are required to have a university degree and a diploma in education. In theory these require three plus two years. In practice the first diploma year and the third year of the degree course can be taken simultaneously.

Teacher training colleges are post-secondary non-degree-awarding institutions. They provide a variety of courses taking between two and three and a half years according to the levels entered for.

The Council for Higher Education has decided that training colleges that can make the grade can be recognized as accredited colleges and be authorized to award to students taking a four-year course the degree of "Graduate of Accredited College in Teaching".

This phrase is the literal translation of the Hebrew original of the name of the degree, though the council prefers to translate it as "Bachelor of Education". It will not be the equivalent of the university BA degree, because, by the logic of the council, only a recognized university can award a university degree: a four-year college course is not a university course.

Graduates of the four-year course will be able to teach in all grades up to and including the tenth, that is, excluding the equivalent of the British sixth form.

In order to help the teacher training colleges make the grade of the degree course, the council has set up a National Academic Council (NAC). Its membership includes 10 university professors, three heads of teacher training colleges and four senior officials of the Ministry of Education and Culture.

The NAC will supervise the academic courses, approve programmes of study, appointments and conditions of service of the teaching staff and recommend to the Council for Higher Education those colleges eligible for accreditation.

Colleges can also come to a working arrangement with a recognized university whereby the latter undertakes academic responsibility. In this case the NAC will keep a watchful eye on the cooperation between the college and the university, for eventually it is the NAC which will have to recommend accreditation.



Nurses will be better qualified, but will there be more of them?

Sweden

Annual assessment of U68 progress proposed

from Mike Duckenfield

STOCKHOLM

Annual reports by university departments assessing how well they are meeting the new goals of post-U68 higher education is one of several planning innovations recommended in a report by the Office of the Chancellor of the Universities.

The assessments would be used initially for discussion between teachers, students and administrators within the departments. Later, however, they could become the basis for introducing incentives and sanctions designed to improve efficiency. Such sanctions could include financial rewards for "efficient" teachers.

In addition, the reports, which should also be prepared at all other administrative levels in the new system, would be aggregated for further evaluation at university, regional and central level. Other recommendations include rewards to universities and colleges which succeed in cutting their costs and changes in tuition methods.

Written by Mr Bertil Ostergren, one of the top advisers at the Chancellor's Office, the report is the second of three to be published between last spring and next summer analysing planning and management in higher education prior to the implementation of the U68 reforms in July 1977.

Its recommendations, which follow discussions with more than 250 teachers, students and administrators, are intended as a stimulus towards discussion on problems arising from the shift from further growth in higher education to redistributing social values on a recurrent model.

Referring to the five goals of U68—personal development, greater affluence, democracy, internationalization and social change—Mr Ostergren says they must be constantly reexamined within the universities to see how they can be more successfully achieved, and annual reports to assess progress should be based on statistical and economic data, course evaluations and special investigations.

To encourage universities to reorder their priorities, which in the absence of future growth will mean closing some departments and courses, he recommends that institutions which reduce their costs should not be punished by having their grants decreased, but rewarded by being allowed to keep the money they save so that they can use it as they please.

However, reducing telephone or cleaning bills is not important, he adds. What is needed is a reform of teaching methods; he suggests a reduction of formal traditional tuition in favour of increased guidance for students and team teaching.

Teachers should no longer be primarily concerned just with lecturing and examining, they should bear a "total responsibility" for the education of their students, including counselling. The aim would be for teachers "to guide students through their studies" with more individual project work, and students themselves acting as teachers for each other in organized study groups.

To encourage teacher efficiency in line with U68's five goals, there should be financial and career rewards, and at a national level the new National Board of Higher Education, which will take over the central planning responsibility from the Chancellor's Office next year, should set aside a percentage of its programme grants to reward high performance.

A special English précis of the first two of Mr Ostergren's reports is now available under the title *Planning for Change in Higher Education*. In it, he invites overseas comment and information. His address is the Office of the Chancellor of the Swedish Universities, Box 16334, S-103 26 Stockholm.

West Germany

Modest rise in residential accommodation despite cuts

by Günther Kloss

In 1973 only 9.7 per cent of all West German students lived in university-owned accommodation, usually of the self-catering, hall of residence type. This was 0.7 per cent fewer than in 1970. Towards the end of 1974 the percentage rose to 10.0 per cent. The fact remains, however, that for 788,400 students there were a mere 79,500 places available.

It became evident last year that the target of the 1970s Comprehensive Education Development Plan to house 15 per cent to 20 per cent of all students in Government-built hostels by 1980 was unrealistic. In order to catch up with this figure by 1978 an average of 13,000 new places would have had to be provided between 1974 and 1978, compared with the average of only 4,600 between 1970 and 1973.

The Federation/States Commission for Educational Planning, the most important educational planning and coordinating body in the Federal Republic, now envisages a total of 122,000 residential places by 1978, which would provide accommodation for 13 per cent of all students. Even this target would require new places at the rate of 10,000 a year. It appears, however, that this year, for example, only 8,500 places will be completed.

Considering the desperate shortage of suitable student accommodation in the Federal Republic, which is even greater than that in urban centres in Britain, it may seem surprising that it should have been allocated such low priority.

The reason lies in the universities' preoccupation with the academic aspect of student life and almost complete neglect of social welfare. This attitude has changed somewhat in recent years, as the expansion of the student grant scheme illustrates, and now, at a time of financial stringency, the Federal Government, which bears one half of the capital costs of all building projects, is still stressing its commitments to students.

For the first time it has been officially recognised that there is a direct relationship between the admission of more and more students and the necessity to find somewhere reasonable for them to live.

Federal and *Länder* governments established in 1972 basic cost and space criteria for the building of new student accommodation. These were designed to keep down costs and to arrive at greater uniformity.

On the one hand, these norms stipulate a minimum amount of space per student place of about 24 square metres. This includes at least 12 square metres of area needed by a student for studying, sleeping, entertaining and keeping his or her belongings; it also comprises sanitary and amenity accommodation, central stores and administration, and circulation space.

On the other hand there is a maximum expenditure limit per student place of DM21,000 (£4,000), which has remained unaltered since February 1972. This limit may be compared to the British Residential Costing Unit but it includes the provision of furniture and equipment.

All public assistance is given as "grants in aid" and no loan finance accommodation is being planned or built. Within the overall limits *Länder* and architects are free to plan all aspects of their student accommodation to their own choice.

In addition, the regulations provide special financial incentives for the *Länder* to reduce costs. These, as well as the outcome of an international architectural competition and the use of prefabricated and standardized building elements, have reduced the average total cost of a residential place from DM28,900 in 1972 to DM26,100 in 1975—despite an 18 per cent increase in building costs.

Special "demonstration projects" are now under construction at Krefeld, Oldenburg and Nuremberg. They will be completed and handed over after only 10 months' building time from start to finish.

France

Medical students strike over 'pay'

from George Morgan

NICE

Demonstrations, strikes and sit-ins have marked the beginning of the academic year in many of France's 49 medical schools and university hospital centres. Since early October medics have been protesting about poor pay conditions for *externes*, medical students employed in university hospitals on a non-resident basis. The *externes* have also been pressing for a national statute regulating their conditions of work.

Since 1970 all medics reaching their fourth year have been obliged to complete six semesters of practical hospital training. Duties range from admission desk reception work to assistance in the operating theatre. At present fifth and sixth year medics are paid an average 330 francs (£36) a month. Fourth year *externes* receive no remuneration.

The position of the hospital authorities is that *externes* are trainees and do not perform a full job of work. In reply the medics have claimed that they enable the hospitals to make considerable savings by performing tasks normally done by full-time staff. They are now calling for a "students salary" of 1,200 francs a month in line with the national minimum industrial wage.

India

Salaries go up—but in return for 'productivity deal'

from A. S. Abraham

BOMBAY

New scales for college and university teachers throughout India, retroactive from January 1, 1973, are now in operation. Lecturers, the chief beneficiaries, will begin at about £35 a month (as against about £20 a month) and go up to about £80 a month (as against about £50).

The Federal Education Ministry will bear 80 per cent of the extra financial outlay for the first five years. After that, the entire cost will have to be met by the State governments, which are constitutionally responsible for education.

Not all provincial governments have accepted the scales. Others like Maharashtra, of which Bombay is the capital, are linking them with new service rules designed to make teachers work harder and longer.

Teachers in Maharashtra are free to work under the old scales if they wish and will have to sign a form indicating their preference by November 30. If they choose the new scales, they must also sign an undertaking accepting the revised terms of service.

So far, teachers in Maharashtra, as elsewhere, have been paid for marking examination papers; now, they will have to mark them as part of their job. If they fail to do any work connected with examinations that might be given to them, they will be guilty of "dereliction of duty" and apart from any action which the university may take, the teachers will make themselves liable to being denied the benefit of the revised scales.

Their workload now will be not less than 40 hours a week. At least half that time must be spent on the premises of the institution for "classroom work" including teaching, guidance, tutorials and consultation. The rest must be given over to "research, preparation for teaching, correction and examination work including invigilation, extra-curricular activities, administration and professional work".

From now on, teachers will not be considered to be "automatically on holiday" during vacations. They will be expected to do any work that might be assigned to them during the period. Altogether, a teacher will now get not more than six weeks' holiday "over the year".

Teachers already in service who do not possess the new qualifications stipulated under the rules will have to get them within five years from April 4, 1975. If they fail to get them by then, they will get no more increments.

For lecturers employed directly by universities, the requirements are a doctorate or published work of an "equally high standard and a consistently good academic record".

Sri Lanka

Major expansion planned for tertiary sector

from D. B. Udalagama

COLOMBO

Plans have been drawn up to award a degree-level Higher National Diploma in Management Studies, according to Mr Badiuddin Mahmud, Education Minister. The course will start in May with an initial enrolment of 1,000 students. Plans were also being made for diploma courses in science, applied science and mathematics, he said.

Mr Mahmud agreed in an interview that although primary and secondary education had expanded during the past three decades higher education had not kept pace.

He said the country had now come to the threshold of major reforms in education at all levels. A key aim of the reforms would be the democratization of educational opportunities and the inclusion of technology as a part of general education.

Mr Mahmud said that the British Open University was the model being adopted in most developing countries for democratizing their higher education systems. He hoped that Sri Lanka would also develop an Open University on similar lines.

Irrespective of employment opportunities, the country should think in terms of expanding higher education. There should be equal opportunities for more than the 16,000 now on Sri Lanka's campuses, Mr Mahmud said.

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Towards the 1980s: II—setting up a national commission

Analysing what was wrong with Scunchester last week was not difficult; and the analysis was supported this week by the Committee of Directors of Polytechnics: "The way in which the system of higher and further education is organized *means* that it is *inherently inefficient*", the committee said (see pages 4 and 27). "It results in a wasteful duplication of too many courses in too many institutions so that taxpayers and taxpayers pay too much for a service that ought to be better than it is."

Suggesting a way out of the mess is more difficult. There has to be some consensus about the solution, which has to recognize the differences between further and higher education in the non-university sector and somehow involve the universities; and a solution ought also to allow for any relevant conclusions of the Layfield inquiry into the financing of local government as well as any proposals for the devolution of government to the English regions.

As a generalization: The *THES* argued last week that the university sector was efficient and that it was the non-university sector, the sector under direct political control, that was at present inefficient and floundering. A pragmatic solution ought therefore to be found first for the 30 polytechnics, the 50 or so Colleges of Higher Education and the other colleges doing degree-level work. It has to sort out the method of financing them and stop the proliferation and duplication of degree courses. Only when this has been achieved, and the non-university sector is strong and efficient, will it be worth considering such ideas as the ending of the binary system and the inauguration of a unitary system and the comprehensive university.

A sensible first step was proposed this week by the CDP. It recognized that the polytechnics coexist with universities, it recognized that the polytechnics are more national than local institutions without ditching the local connexion, and it exposed the flaw of trying to cope simultaneously with higher and further education.

The directors also made the important point that regional and national committees will gain respect only if they are small enough to be competent and if their members are chosen for their ability rather than to represent every vested interest. Some lessons ought to be learned from the contrast between the confidence which universities place in the UGC and the lack of confidence which local authority colleges place in the regional advisory councils", they said significantly.

Suggesting that a solution could be found which provided for local control of local work and national control of national work, they mooted the establishment of a national body to decide policy, determine the requirements of different types and education ("academic" and "applied"?) and allocate resources. Only when a national body was established should the business of regional bodies be considered, they said.

Although the directors would probably flinch from saying so, for fear of seeming to suggest a university solution, they seem to be proposing some form of national commission on the same model as the UGC, with a dual system of support from local and central government, analogous to the dual system of support for university research from the UGC and the research councils. It is a neat and ingenious idea (and Sir Alex Smith, chairman of the CDP, who is a member of the UGC, has been able to see it in action).

A Polytechnic Grants Committee is not on because about a quarter of the degrees outside universities are not in polytechnics but in colleges and still more colleges doing degree work are now being created. So what the directors seem to want is some form of Advanced Further Education Commission, or a Colleges and Polytechnics Commission or, more simply put, a Higher Education Commission, alongside the UGC.

The directors leave it there, without suggesting whether a commission should be advisory only, or whether it should also be empowered to make grants to the 100 institutions that would report to it (and to statutory bodies would diminish the power both of the DES and of local authorities).

A small independent advisory commission of about 25, with the power to approve courses, would certainly be useful and it would have the added advantage of dissociating the DES from the sort of awkward local political decisions which have bedevilled the reorganization of the colleges of education, as well as enabling the department, as it should, to make the major national decisions about, say, the sizes of the university and polytechnic sectors.

Yet if the UGC is so respected by the universities, and if the universities are demonstrably efficient, there is surely no reason why the same administrative device should not be established for colleges and polytechnics; the power to approve grants would powerfully reinforce the power to approve courses or to establish academic guidelines for institutions—and that power would rest mostly with academics rather than civil servants.

Nor need any national commission affect the local and regional work of colleges and polytechnics, since under a dual system of financial support, regional councils would make grants for regional work in the main, probably, for short and part-time courses and for adult and recurrent education; and if the demand for this level of work was so clearly identified, with grants specifically attached to requests for it, there would be a powerful incentive for colleges and polytechnics to engage in it.

Other strong advantages of the creation of such a national commission are that it would give the polytechnics more self-respect as well as a national agency to promote the ideal of the polytechnic. It might also begin to end the present division into first and second-class institutions.

The DES is said to be listening carefully to reactions to the Council of Local Education Authorities' proposals for regional councils. (*The THES*, November 7). The idea that the directors of polytechnics have put forward, and which the Council for National Academic Awards is also said to be considering, is running on a strong tide.

DES priorities

from Miss Janet Fookes MP

Sir,—As you know, the Education, Arts and Home Office Sub-Committee of the Expenditure Committee, of which I am the Chairman, is embarking upon an inquiry into priorities and decision taking in the Department of Education and Science. We shall be taking evidence on the subject from a considerable number of organizations and persons.

There may well be others whom the sub-committee will be unable to meet and who have views on the matter that they would like to communicate to the members. If so, I can assure them that we would be very glad and interested to receive them. Perhaps they would be good enough to address any such communication to the Clerk of the Education, Arts and Home Office Sub-Committee, Committee Office, House of Commons, London SW1A 0AA.

Yours faithfully,
JANET FOOKES,
House of Commons,
London.

LETTERS TO THE EDITOR

Poly facts and empty places

from Sir Alex Smith

Sir,—I would like to raise three points to dispel some of the alarm that runs through your last issue (*THES*, November 14).

Firstly, at the beginning of your leader you state: "Universities still have thousands of empty science and technology places. That is not their fault, but they are empty nevertheless." But on your front page there is a very misleading headline which says: "Unpalatable facts about poly courses in secret report", and there follows detailed information which can be summed up into much the same statement as that about the universities, namely that the polytechnics have many empty places in science and technology. On this occasion, however, you give the impression that the fault lies with the polytechnics.

Incidentally, there is nothing particularly secret about the matter. Although there are some factual errors in your statement, it is generally correct, and it has highlighted a matter for very real concern.

But let us be quite clear on what the matter for concern really is. It is that in the whole of higher education—universities and polytechnics—there is a shortage of students wanting to take vocational courses in science, technology and engineering.

I am quite sure that the way in which higher education is organized means that it has its inherent inefficiency, resulting in too many courses in too many institutions, and it is getting worse. In the local authority sector of higher education there is a course approval system. It is complex, cumbersome and, much in need of improvement, but its purpose is to create a match between judgment of what the community needs from education and estimates of what young people will actually choose.

As far as the polytechnics are concerned, the broad summary is that we have somewhere in the region of 7,500 empty places in science, technology and engineering—an average of 250 places per polytechnic; that means that our facilities are over 80 per cent full. What has happened is that, although applications for admission to science, technology and engineering courses have continued to rise over the years, the rise has been less than expected. In the rest of our provision—in the professional and social areas of our education—we are inundated with applications, and we have about 5,500 more students than we ought to have; the accommodation is about 110 per cent full.

That, surely, is not all that bad a match, and I hope that these figures will restore a sense of perspective. If the railways and airlines could predict demands for their services and run them so that they were over 80 per cent full, their finances would be in a much healthier state.

The real matter for concern, though, is the implication for the future wellbeing of our industries. The Government has just made a statement on industrial strategy, in the foreword of which it states that "while we tackle immediate problems, we must also get to grips with the long-term weakness of British industry". The paper makes no reference to the relationship between education and industry, yet there lies the most fundamental weakness of British industry. There is an anti-industry attitude prevalent in our society, and the shortage of young people opting to do engineering and technology is a symptom of that malaise.

The situation is in fact worse than that indicated by the figures, for a high proportion of students in science, technology, and engineering are from overseas. The lack of young people in our country interested in applying their knowledge, ingenuity, inventiveness and artistry bodes ill for the future of industry and therefore for the future of our society.

The attempt in both polytechnics and universities to provide avenues for more able people to embark on industrial careers is fundamentally right; the fact that there are some courses not attracting students means that our institutions are at least trying various ventures—and nothing ventured, nothing gained. What is wrong is the set of social and educational circumstances which discourages young people from taking these opportunities. We must all get to grips with that weakness.

My second point arises from your leader. "Universities are now the most efficient and effective sector of higher education", you say; "it is the non-university sector that is inefficient and floundering".

Please do have a care. Mr Mulley quoted in the House of Commons on November 3 the unit costs in education. His figures for 1973/74 were polytechnics—£1,130; universities—£1,490. If our unit costs are as low as three-quarters of those in the universities, we cannot be all that inefficient by comparison. It may be that the whole system is floundering because of the lack of clear definitions of the roles of the various institutions within it. The polytechnics are fortunate—and unusual—in that they are the only group of institutions, apart from monotechnics, which a clear definition of their role—and they are sticking to it.

My third point also comes from your leader. You assert "The colleges and polytechnics are also decentralized". Incidentally, every time you make a statement like that you generate and spread low morale. But the statement is just wrong. From the many polytechnic staff, and students, that I meet, I have a firm conviction that morale is high, that there is a confidence and assurance about them. They are clear about their purpose, proud of it and committed to it, and more and more of the students are there from preference.

The polytechnics are moving steadily out of the phase in which they were second-choice institutions, and into the next phase of development of their particular and much-needed contribution to education.

Yours faithfully,
ALEX SMITH,
Director of Manchester Polytechnic and Chairman of the Committee of Directors of Polytechnics.

Academics' pay

from Professor Sidney Pollard

Sir,—No one who has lived through the past 18 months will wish to gainsay Mr Hartnett's point that the Department of Education and Science have been waging a bitter war against the universities, and winning it (*THES*, November 14. It has ranged over university planning and finance as well as over academic salaries.

I cannot, however, share his belief that we can fight back. Neither the University Grants Committee nor the Vice-Chancellors' Committee, nor the Association of University Teachers have been able to protect us. His particular proposals for guerrilla warfare are equally doomed to failure: academics are simply not disciplined enough to carry it through.

Since, evidently, we cannot do battle, and our interest is clearly the opposite tactic: formally to sue for peace and ask for the terms of surrender. What is it that the DES want of us? To destroy the universities, as we know them? To put on as much pressure that some, the weakest, will go to the wall? To reduce us to the level of polytechnics, or even below, while raising them to become centres of excellence? Or is it a conviction that now that we have become a second-rate economy with a second-rate Civil Service, it is somehow indecent for British universities still to be classed among the world's best?

The knowledge of what is instore for us would allow us to take intelligent action on a personal level. I fear that there are still too many colleagues who feel that simply because the present position offends all sense of justice and is totally contrary to our long tradition and to the practice of other civilized nations, therefore it cannot last. In the present climate it could easily last another three, by which time it will have become the norm.

But knowing what will happen will allow those of us who can escape, to the professions (including the Civil Service), to the more favoured areas of higher education or abroad—and I suspect it is the large majority—to do so in good time.

Those who cannot, or those who prefer to soldier on regardless, will at least be able to adjust their personal lives accordingly: move into cheaper houses and poorer districts, take on a second job, and postpone marriage rather than piling on overdrafts in vain hopes of improvements.

What have we to lose by knowing the worst?

Yours faithfully,
SIDNEY POLLARD,
Professor of economics and social history,
Sheffield University.

from Mr. A. Tattersall

Sir,—Professor Saville (the *THES*, November 14) disagrees with my statement (the *THES*, October 17) that professors have had a raw deal salary-wise and that academics are a depressed class. He should know. Increases in the professorial "average" have been as follows:

Oct	From	To	+
1971	£5,610	£6,003	7%
1972	£6,003	£6,528	8%
1973	£6,528	£6,777	4%
1974	£6,777	£7,125	5%
1975	£7,125	£8,884	24%

About half our professors are getting less than the "average" (the minimum being £7,501) plus £84 threshold and probably the statutory £312). Meantime, inflation has been running up to 20 per cent a year. The National Union of Mineworkers, whether led by Mr Gormley or Mr McGahey, would laugh themselves silly over the figures for 1971-74. And as for "relativities" which are what I thought mattered—well, ask Hough on morale in general, Professor Saville's colleagues at Hull must be more long-suffering than mine in London. I was truthfully reporting the effect of Houghton/DES/Wage Limits on them. They *are* depressed, and the Association of University Teachers is now speaking for most of the staff of universities.

Yours faithfully,
A. TATTERSALL,
Secretary,
University College,
London.

Tories and parents

from Mr Norman St John-Stevas MP

Sir,—While I personally favour the eventual abolition of the parental contribution as an element in student grants it is not the case that the next Conservative government is pledged to abolish it (*THES* November 14).

I would like to make the situation clear. As soon as economic circumstances permit we will review student grants as we have done in the past. In that review we will give priority to the reduction of the parental contribution.

Yours faithfully,
NORMAN ST JOHN-STEVAS,
House of Commons,
London, SW1.

Maths mistake

from Mr David Craig

Sir,—I would like to apologize for a mistake which has been brought to my notice in my "Don's Diary" (*THES* November 7), that in the University of Lancaster, major mathematics students were not allowed to take the free-ninth unit which gives people a chance to avoid undue specialization.

This was quite wrong; mathematics students do have this freedom, and I apologize to the department concerned.

Yours sincerely,
DAVID CRAIG,
Lancaster University.

More Letters, page 15

Dead hand of learning should be turned to useful skills



An imbalance exists in our educational system between traditional academic disciplines and skilled activities, Patrick Nuttgens says. He argues that righting it in favour of skills is one possible way out of some current social and industrial crises.

He who judges the contenders prescribes what they shall do. It was only in the early years of this century that the system of school examinations was developed which effectively dictates the pattern of school teaching and the careers of school children throughout the country. Various examinations had been instituted in the last half of the nineteenth century; but by the early years of this century the multiplicity of examinations needed simplification, and in 1917 the universities were recognized as the responsible bodies for conducting examinations.

The establishment of this system had an effect more profound and probably disastrous than could have been expected at the time. It was emphasized by the Board of Education that it should "be a cardinal principle that the examinations should follow a curriculum and not determine it". In practice the very opposite happened.

The examinations and their requirements became the key to studies in the secondary schools. They also became something more. For the examinations were not only school leaving examinations; they were also qualifying examinations for entry to the universities. The examinations intended to give a certificate to school leavers thus became the passport to higher education for those lucky enough to obtain one.

It is impossible to exaggerate the importance of this development. It made entry to the universities the highest aspiration for teachers and pupils, and it had a profound bearing on the subjects which would be taught, their nature and scope and the character of the educational experience of the pupil.

For it established an unbroken circle of educational experience. The circle goes like this. A student at a university graduates in one or more disciplines. He then enters a school to teach at secondary level the same disciplines in which he himself was trained at university. The pupils trained by him are selected so that the most able will reproduce the disciplines in which the teacher himself was originally trained.

The successful ones take a school leaving examination in precisely those disciplines and enter a university where they are restricted because of the type of A levels taken, to studying those disciplines again—that is, the disciplines which the university has developed, taught to the teachers and still has available for those who have passed the right A levels.

The tyranny of the situation and the iron band which encloses the circle is the nature of the university academic disciplines. But what are those disciplines and what are they now? When the medieval universities were founded they provided a training for public life for the limited number of men who would attend the university and find a career in church or state.

By the nineteenth century the educational system had begun to bifurcate. In the aftermath of the Industrial Revolution, colleges and schools of technology and art and commerce and education were founded to equip people with the skills and for the tasks necessary in an industrial and urban society. Teacher training colleges especially were founded not to duplicate the work of the universities, but to provide teachers for the ordinary schools in that industrial environment.

Meantime the universities were themselves going through a major change. This involved the emphasis on a liberal education. First at Oxford and Cambridge, then at the new universities in the big industrial cities (no matter how many of them were actually founded as vocational schools for activities such as cloth-working, textiles, or engineering), the fundamental ethos of the university became that of a liberal education and the dominance of the basic academic disciplines—English, history, mathematics, physics, chemistry, philosophy, and so on. They were there, it now seemed, to equip people not to perform a task or to fill a role, but with a well-stocked mind, and a critical awareness of the world.

The dominance of the academic disciplines thus created a serious imbalance. Because they effectively dictated the character of the school leaving examinations, they inevitably dictated the character of the school curriculum.

The influence of the academic disciplines went still farther. It rested on the conviction (inevitable in a university) that knowledge and critical awareness are verbal and to an extent numerical. So there grew up a hierarchy of esteem in which subject areas were graded. At the top were the traditional disciplines. At the bottom were the activities with which the university could not cope—visual realities, creative activity and physical skills.

The first step towards bridging this gulf between learning and skill was the fostering of the concept of applied knowledge. That rested upon the assumption that the world of practical affairs was essentially guided by the application of pure knowledge to the real world. Hence the concept of "applied science".

That assumption was fundamentally incorrect. Applied science was not at all what the giants of the Industrial Revolution dealt in. People like the Arkwrights, Brindley, Telford, Dalton, Faraday, George Stevenson (none of whom had had a higher education) dealt in technology—the understanding and creation of means to ends, and the solution of defined, immediate problems.

It was not applied science because it did not start with science. Indeed it was usually the other way round; the technological solution to a real problem revealed a basic truth which could then be studied as knowledge for its own sake. Far from being secondary, technology was the primary force; it was the general principles, the science, that followed.

So why could not education start, like the Industrial Revolution, with technology? In practice it never has. Many attempts have been made to reorganize education, either to make it more egalitarian or to provide an acceptable alternative education for the pupils unable to aspire to the top.

Famous among these experiments was the institution of the secondary modern schools at the end of the Second World War. Subsequent changes testify to their failure. Now we are in the process of making schools comprehensive, to achieve the egalitarianism of principle and the educational opportunity for the non-intellectual which the secondary modern schools notoriously failed to provide.

The new comprehensive schools will fail as surely as the secondary moderns in both their aims. They will fail because the fundamental assumption of the people organizing the schools are the same—that the highest peaks of education are those most near to the universities, and that the end of a school's work is the passing of examinations in disciplines relevant to that world.

Even the establishment of General Certificates of Education and of Mode III examinations for the CSE cannot break down that fundamental fact. While everybody ultimately believes that the most profound education is verbal and while the universities maintain their stranglehold on the examinations in the schools it will not be possible to escape the inevitable assumption in the schools—that practical people are stupid.

A comprehensive education must be comprehensive in the range of its teaching and its standards, not just in its name and the IQs of its pupils. Any fundamental change must allow for the actual abilities of children rather than the illusions of their teachers.

So far this country has not faced that possibility. The stranglehold—the dead hand of learning—will not be taken off until the pursuits of schoolchildren are no longer based on the traditional disciplines (or even the applied disciplines) but are actually activities themselves. For in what does a child find his abilities and self-realization? By no means all in theoretical knowledge, but in activities—doing and making.

Is it possible for a major part of the curriculum in a school—not subsidiary subjects, but the core of the work—to be in the field of *activity*, to apply to the secondary schools some of the thinking that has been successful in primary schools?

If so, it would reflect what is happening in higher education. For the pupil whose studies have been centred upon activities, the possibility of a higher education already exists—in the polytechnics that have insisted upon their vocational role. The polytechnics are potentially the key not only to the reconstruction of higher education but to a reassessment of the whole of education in this country. For they were intended to provide a means of access to a route through higher education—a route not through verbal knowledge or knowledge for its own sake, but through the practical arts.

But if the polytechnics can be accepted as equal in status with the universities, however practical and vocational their work may be, this surely has a significance for the schools. If it is as honourable for a student to enter a polytechnic as a university, it must be as desirable for a pupil in a secondary school to follow pursuits that lead there.

It may be in any case that the imbalance in the educational system lies at the very heart of our present social and industrial crises. This country has established a system of education which gives priority and eminence to precisely those people least able or willing to contribute to its growth and efficiency. That may have been adequate in an era of leisure and cultivation. But neutrality, as Roy Niblett pointed out recently in The THES, is of no use as a permanent frame of mind.

Dr Nuttgens is director of Leeds Polytechnic

Are university teachers members of the working class?

In a thoughtful and thought-provoking article (*THES*, September 12), Ivor Crewe discussed the question of whether university teachers can be said to belong to the working class. The majority, he concedes, earn their livelihood solely by selling their labour power (i.e brain power), but that is hardly sufficient reason for assigning them to the proletariat.

On the other hand, there is, he asserts, lots of evidence against such an assignment. Thus:

(a) When the Labour Party constitution spoke of "workers by brain", it meant people such as clerks and minor officials. It did not mean to include the "salaried classes", and therefore academics ought to be excluded on grounds of income and income expectation.

(b) Academics do not have working class work patterns (like regular clocking-in and strictly-assigned holidays) and their job security is greater than that of workers.

(c) They do not produce surplus value, and there is no one to exploit their labour.

(d) They are largely free to choose their own areas of work. Sometimes they even employ others, such as secretaries and research assistants, to do their work for them.

Ivor Crewe's article arose from Jacques Attali's article in *Marxism Today*.

Nevertheless, it seems to me worthwhile to make the above case in the form he puts them, although I think they reflect fairly accurately the view which many academics have of themselves and of their work situation.

With regard to his first point, it seems likely that he is historically correct. When Marx wrote *Capital*, he was under no illusion that the "salaries" drawn by directors were anything other than a disguised form of return on capital.

This situation had not changed substantially by the time Labour's constitution was framed. At that time it was not too misleading to draw the dividing line of bourgeoisie and proletariat between those earning (high) monthly salaries and (low) weekly wages.

But today the situation is vastly different. Many of the traditional functions of management have now devolved on to a section of the working class.

A whole army of quality controllers, programmers and planners has come into being. Such people organize their demands for salaries and conditions of service through traditional working class channels; through trade unions like the Technical and Advisory Staffs Section of the Amalgamated Union of Engineering Workers and the Association of Scientific, Technical and Managerial Staffs.

Furthermore, because these new groups have similar cultural backgrounds and working conditions to many of the older salaried groups, the latter have also most of the teaching unions are now affiliated to the Trades Union Congress and it is even possible that the Association of University Teachers will shortly follow suit. So salaries, either "high" or otherwise, do not exclude a group from the working class.

The second point—academics' work patterns and job security—needs careful handling. It can all too easily degenerate into a collar and tie versus overalls comparison, leading to the inevitable banal conclusion that academics are "middle class".

Marxists, however, determine the class of a group by looking at its place in the relations of production. To classify a group as middle class may, therefore, be saying something about the more superficial social and political attitudes of that group, but it does not settle the question of whether that group belongs to the proletariat or the bourgeoisie.

One cannot, of course, leave it at that. The work discipline of the working class has played a crucial role in helping it to develop a class consciousness and to organize its economic and political demands.

One reason for the confused view of themselves which many academics have is undoubtedly the relative absence of such a collective discipline. I shall return to this point a little later on.

On Crewe's third point, surplus-value, the first thing to note is that the same argument applies to dustmen and bus-drivers. They also do not directly produce surplus value, but the services they supply do contribute to a higher productivity of labour, and therefore to a higher rate of exploitation, in the productive industries.

A proportion of the surplus-value extracted in those industries must be reckoned to have come from the workers in the service industries. Surely the fact that university teachers, indeed all teachers, are a vital component in the production of a skilled labour force, means that this same analysis applies to them.

More surplus-value is extracted from a skilled than from an unskilled worker, and a portion of this increased surplus-value must be regarded as having been produced by those who trained the skilled worker.

Now for the last point. I think Crewe has here drawn attention to a real difficulty. The research of many academics is undertaken and carried out in a highly individual manner.

It is not surprising, therefore, that many should come to regard that own little plot of knowledge as private property. Their outlook, or consciousness, is to that extent that of the petite bourgeoisie rather than the proletariat.

But are they, perhaps, mistaken? Could one, perhaps, say that this is a false consciousness?

I would say, yes and no. For a small minority, the most successful operators in fact, their research really has become a kind of small business.

They employ research assistants, they buy and sell research contracts and undertake consultancies, and in some cases they may actually derive a bigger income from such transactions than from their university salaries.

For such academics, that consciousness is not at all false. They belong properly to the petite bourgeoisie, and they share its traits, tribulations, vacillations and illusions of that class.

But what of the rest of us? Of course, we all like to pretend that we are in the early stages of building up a business, just as, in the early days of capitalism, every journeyman thought he was on the way to becoming a master. But how many of us are likely to arrive? And is that really what scholarship is about?

Surely, for most of us, knowledge is something we produce or, if you prefer, extract, and then present freely to society, at large. To that extent, the production of knowledge is a public service, just as much as the production of graduates.

Is there any surplus-value extracted from it? Certainly there is. Much scientific knowledge is used, more or less directly, to improve the productivity of labour.

And even the most esoteric and abstract knowledge helps to improve our own productivity of labour. Is that not what we mean when we speak of the organic link between teaching and research?

With one substantial proviso, therefore, I would say that university teachers are, objectively, part of the proletariat. That many of them, so far, only dimly perceive this truth is because of the false consciousness which they at present have.

Nevertheless, these are signs of a substantial change of outlook, brought on by the enormous changes we have seen in higher education within the last two decades.

Trevor Marshall

Dr Marshall, a member of the AUT executive, teaches mathematics at Manchester University.

BOOKS

Eliot, as critic and creative artist

Eliot
by Stephen Spender
Fontana, £0p
ISBN 0 00 633467 9

Selected Prose of T. S. Eliot
edited by Frank Kermode
Faber & Faber, £5.25 and £1.95
ISBN 0 571 10263 8 and 10365 3

T. S. Eliot has now been added, and not a day too soon, to the Modern Masters series edited by Frank Kermode for Fontana. It was a happy thought to invite Stephen Spender to write the book. Spender first met Eliot in 1928 and remained on easy terms with him for the rest of the poet's life. Books in the Modern Masters series are supposed to be introductions to their subjects, and they are written on the understanding that their readers are approaching the masters for the first time. The introductions are meant to be gracious and helpful, but not condescending. I assume that Spender was considered an especially suitable writer on this occasion not merely because he has written well, if briefly, upon Eliot already, but because he has the advantage of having known him well. His book was likely to be an interesting personal memoir as well as a sound work of criticism. In the event, the book is indeed personal but not personal enough.

Spender speaks of his acquaintanceship with Eliot, but he has acted upon a scruple which has prevented him from claiming a deeper degree of friendship. It is clear that he revered Eliot and that Eliot's poems are important constituents in his consciousness, but he is unduly abstentious in writing of Eliot in personal terms. Frank Kermode quotes, in his introduction to *Selected Prose of T. S. Eliot*, a remarkable letter from Eliot to Spender in which he speaks of the bewildering minute in which one surrenders to a poem. The man who received that letter would now be justified in acting upon the degree of friendship which its reception warrants. Eliot was never facile in his friendships, or promiscuous in the disclosure of his mind. It may be said that Spender's relationship with Eliot emerges in the style of his book, and this is true, but there is a time for being explicit as well as fastidious.



T. S. Eliot, from a drawing by Sir William Rothenstein.

Spender's book is a guide to Eliot's poems, plays and criticism, a conscientious book rather than a survey. Most of the themes are well established, but Spender has his own sense of them, and even when we think we are on familiar ground we regularly find that his response to the landscape is delicately nuanced. I found myself nodding in agreement, to begin with, and then realizing that the ground of agreement was often touched with a certain hesitancy of feeling, and that the flick made a difference. I was shocked, too, to find that Spender does not surrender himself to Eliot's "Gerontion" as completely as I do, and that he finds its rhetoric resistible, so I have to read the poem again and question my sense of it.

In general, Spender's understanding of Eliot seems to me admirably just. "Ea is moss-a poet, when he is describing extreme conditions, and the Dantesque circumference which surrounds his ward is of consciousness always at the most extreme state of awareness of horror or boredom or glory." Yes, that is true. Eliot's gypsy phrases are inscribed upon a terrifying vision, his lucidity forces us into a world of moral absolutes all the more exacting because we only want to be left alone, passing the time, neither fish nor flesh. His poems are terrifying because they contrast us to make judgments and to act upon them, they exert upon our daily lives an exacting conscientiousness, requiring from us a sense of what lies beyond surface and beneath us. Beyond nature, there is the other world which Eliot's poems invoke as pattern of form, the moving stillness of a Chinese jar. Beneath nature, there is the aboriginal world, the primitive horror caused in Eliot's early poems by a doubt that individual existence, such a pattern, and trusts himself enough to follow its lead from tumult to sunshine.

Kermode's selection is splendid, 300 pages of Eliot's most vivid prose. Mostly, he endorses Eliot's own choices, as given in the *Selected Essays, On Poetry and Poets*, and *To Criticize the Critic*. And he has avoided snippets as far as possible. If the selection has a positive tendency, it is to shift our attention somewhat away from English and American literature toward "the mind of Europe" and its culmination in Dante. What I have just said is contestable, because the selection includes the major essays on the metaphysical poets, and dazzling pages on Marvell, Lancelot Andrewes, F. H. Bradley and Henry James, but its centre of gravity and illumination is none the less Dante as the poet of the mind of Europe. This emphasis I very much welcome.

I do not claim that we have exhausted the possibilities of Eliot's essays on the English poets and dramatists, or that his reservations on the nature of tradition have been ignored. But we have not given enough attention to the mind of Europe or to Eliot himself as one of its constituents. The essay on Dante is vulnerable at several points, we are not obliged to swear by its letter, but it is central in Eliot's achievement as a critic because of the commitment it makes. For that reason I am sorry that Kermode, giving 25 pages of the essay, had to exclude the third section on the *Vita Nuova* and the little note to the second section. For the same reason I am sorry that he could find room for only one page of the essay on Pascal. But it is still an admirable selection.

Kermode's editorial work does not consist solely of the selection. His introduction is brief but highly illuminating, especially on the continuity of Eliot's critical interests. He has also given the sources of Eliot's quotations, a most useful service since Eliot was in the habit of ascribing a quoted passage to "a contemporary" without bothering to give the name. I am puzzled by two points. I cannot understand why Kermode included the essay on *Hamlet* which he considers one of Eliot's "least impressive" essays; perhaps he found it too difficult to make a context for the paragraph about the "objective correlative". Second, a very minor point: a reader who is bewildered by the reference to 80,000 Russians in Eliot's essay on *Vers libre* will be hard put to consult John Hayward's old selection for the explanation. It is a pity it is not given in the new selection.

I hope, incidentally, that students whose interest in Eliot's criticism will be whetted by this selection, will exert some pressure upon his publishers to put the quotations in the text. Going through the essay on the metaphysical poets again, for instance, I found myself halted by his use of the words "refined" and "crude" especially in the passage which begins: "But while the language became more refined, the feeling became more crude". This has always seemed clear enough, but I now find it odd and unconvincing in what sense can the language be more refined if the feeling is cruder? The matter is not cleared up by later use of the same idiom; as in "What is a Classic?" where Eliot finds in Virgil "a refinement of manners springing from a delicate sensibility". Again, Marvell's wit "is more Latin, more refined, than anything that succeeded it". "Purity" is another word from this area of Eliot's language: Gray and Collins, "with all their accredited purity, are comparatively poor in shades of, feeling to contrast and unite". Normally Eliot defines "the classic" in terms of poise and balance and the society which makes these values active, but I find him confusing when he resorts, to a different idiom, such as the chemical figures to which he was somewhat inordinately attracted. "If it is precisionistic true in Eliot's case that the critic and the creative artist are one and the same person, it is reasonable that the language of his criticism should be studied as carefully as that of his verse. Both have the same motive. "We flight," Eliot said, "rather to keep something alive than in the expectation that anything will triumph".

Denis Donoghue

Poetic form

Vision and Resonance: Two Senses of Poetic Form
by John Hollander
Oxford University Press, £7.00
ISBN 0 19 501898 2

Poetic form is a subject which interests a few readers of poetry intensely, and the majority hardly at all. Perhaps the stimulus to the study of prosody and shaping that was once provided by a classical education may eventually reassert itself in some quasi-structuralist guise; but recent expositors of poetic codings have shown more interest in the shape of the content of a poem than in the overt shape of the poem itself. So there is particular reason to welcome a book which, while it treats of form and never betrays the principle that form is of crucial significance, is at the same time deeply mistrustful of "overly systematic metrists who are not unduly committed to what poetry is about".

Professor Hollander brings to his investigation a sharp ear and a whetted Ockham's razor. He shreds the musical analogy that has for so long been the preferred refuge of the idle critic, and he slashes those poets who have offered misleading or mystifying explanations of their procedures. Yet his approach is catholic, and one of the liberating features of his book is his insistence that forms of measure other than regular stress and regular duration are at once sufficient orderings in themselves and active agents even in poetry which finds its primary ordering in traditional stress and duration. His book is bounded by chapters on the poem in the ear and in the eye, and it includes discussions of "figured poems" (Shmuel's "Wings", Herbert's "The Altar"), of layout, and also (though here his books exceeds its logical limits) of the limitation and shaping that can be imposed on a poem by its title. He draws his examples from five centuries of English poetry, with occasional dips into Greek, Latin and French verse, and one of the main pleasures of reading him is his capacity to show us the unexpected in the familiar, and to make us feel again at poets we may have undervalued—Swinburne and D. G. Rossetti, for example.

The more the pity, then, that as a stimulating a book has not itself been properly shaped from the patchwork of separate studies out of which it is made. As readers of poetry we may be made to profit from a tussle with a text, with arrogant-over-riding the metre and the superficial syntax to force us to deeper meanings. But this is not a proper strategy for criticism, particularly when the criticism directs us, ironically enough, to first principles. There is too much repetition, lack of examples and of ideas, and too loose an employment of a specialist's vocabulary: it is not greatly enlightening to learn that such-and-such a line or stanza is "a paradigm of the poem's unique mode of Hinearity". None of these things make for lucidity: nor do constructs as the Frenchman said when asked if he had dined on the Chasse packet.

It would not have mattered if the arguments been of less interest, importance and topicality. It is the nature of the subject that few of us will accept all Hollander's propositions without qualification. Musicians will certainly balk at some of his incursions into their field; perhaps most readers will dispute his notion that a poem can have as its notional measure a "typographic strip of x ems". Given the disposition of stress within a text in English once a handful of such lines have been written recognizable incidence of certain patterns occurs, and though a poet may claim that he writes to the eye measure this is merely anything long; it is the aural measure that is alive in the verse. Yvor Winters's account of Wallace Stevens's "The Straw Man" is less tendentious than Hollander implies. But even a hundred disagreements over particulars such as this will not lessen the importance of the proposition he enunciates on each page: that without an informed sense of formal principles any reading of any poem is doomed to partiality and solipsism.

Richard Luckett

BOOKS

Introducing 'Quantitative Social Science'

Measurement in the Social Sciences
edited by H. M. Blalock
Macmillan, £8.00
SBN 333 17814 9

Data Reduction: Analysing and Interpreting Statistical Data
by A. S. C. Ehrenberg
Wiley, £9.00 and £3.95
ISBN 0 471 23399 4 and 23398 6

Social Science Research: A Handbook for Students
by G. S. Ferman and J. Levin Wiley, £2.65
ISBN 0 470 25759 8

Mathematical Methods in the Social and Managerial Sciences
by P. Hayes
Wiley, £9.50
ISBN 0 471 36490 8

Introduction to Quantitative Aspects of Social Phenomena
by E. W. Montroll and W. W. Badger
Gordon & Breach, £8.50
ISBN 0 677 04070 9

Deciphering Data: The Analysis of Social Surveys
by J. Silvey
Longman, £1.60
ISBN 0 582 48041 8

I am reliably informed that in the United States "positivism" (that catch-all term used by one reigning orthodoxy to signify all attempts at formal explanation) is enjoying a revival, and it seems that increasing demands are being made that "quantitative social science" features more strongly in undergraduate courses. But academic disciplines get the methodology they deserve, and the concerns of the substantively oriented and the quantitatively oriented continue to pass each other by, at least at the "softer" end of the social sciences. Yet resistance to methodological and mathematical approaches is often well founded. With some notable exceptions, mathematical social science has, by and large, ignored the issues and problems which exercise and absorb practising researchers, and has concentrated instead on the tractable and the formally pleasing. Good mathematical social science should address the problem of the practitioner directly and neither mathematics nor theory, should just "set-up elaborate scaffoldings for future use", as Harrison White has graphically expressed it.

All these books tackle these problems in different ways, and at different levels of mathematical sophistication. It will be useful to divide them into three—the elementary texts (which assume virtually nothing), the intermediate level ("nothing more than high school mathematics is required") and the more advanced (assuming familiarity with the differential calculus).

Forman and Lovin, and Silvey address the undergraduate sociologist, who is fulfilling his "methods" requirement, and they provide him with a simple introductory overview of techniques of methods of social (largely survey) research. Silvey's book fulfils this role better, and at a considerably reduced cost. With such compression (138 small pages) distortion is inevitable and as a result, many important and interesting developments are simply alluded to. But I should be prepared to use the book as a simple and useful overview of conventional social research. I cannot say the same of Forman and Levin's book which is an ill-prepared text, of considerable unevenness, and curiously incomplete—there is virtually no discussion at all of inference, yet an excessive appendix contains details of computer job control specification which does not even apply outside the author's installation!

Ehrenberg's book is concerned to "teach numeracy". As he expressly states, the main point of the book is to teach the researcher how to make a good summary of data. Unlike the traditional statistics text, virtually half the book is taken up with the summarization of data. The user is taught how to describe, portray and interpret data, and to assist him there is a large number of interesting and non-trivial exercises. Subsequent sections consider linear and non-linear relations, statistical variation (including an excellent chapter on theoretical distributions), correlation and regression, sampling and experimental design. There are, of course, shortcomings; the section on multivariate analysis is far too short, and it becomes self-consciously didactic in some sections, especially when conveying the author's prejudices. None the less, the book reflects the work of a person well-skilled in the techniques and methods he describes, and there is a sense of intellectual excitement, competence and relevance which is unusual in such a text. It is therefore precisely the sort of text which real-work practitioners, as well as academic researchers and students, should be referred to.

Yet despite these good qualities, Ehrenberg's book does not address the social scientist's problems directly. The Blalock volume, which consists of contributed sections gathered under a number of general topics, is designed to tackle issues which he sees as at the centre of current sociological methodology—scaling and measurement, multiple indicators and unmeasured variables, and ordinally-valued statistical analysis. There are contributions by a number of leading authorities in the field (D'Andrade, Boskoff, Werts) and the book includes a splendid and long-awaited paper on "masking" in sociometry, which by implication calls into question virtually all conventional procedures for collecting such data. Even though the "Blalock tradition" will be felt by many to be restricted, this volume provides it with an excellent justification, and illustrates just how much has been achieved over the past ten years.

Both the remaining volumes expect a high degree of mathematical proficiency, but are otherwise very dissimilar. Hayes provides a thorough, and well-presented exposition of differential equations, convex analysis and convex and geometrical programming. These areas of mathematics are extensively used in operations research, business studies and economics but they have only just begun to penetrate sociology and cognate disciplines. (None the less, widely used methods such as non-metric scaling minimizes badness-of-fit measures subject to sets of constraints, therefore extensive use of procedures developed in this framework.)

I come finally to Montroll and Badger's book. It is the outcome of a series of lectures by an eminent physicist, assisted by his graduate assistant, who views social science as a hobby. Like other social physicists (or political arithmeticians) the problems he poses and, above all, the types of explanation he offers are different from those of most contemporary sociologists. The first part of the book is thoroughly conventional, concerned with population dynamics and statistical distributions, but in the second half, where he turns to stock market speculation, traffic flow and pollution it becomes fascinating, absorbing and instructive.

Returning to the "level one" books, the contrast is startling. The level of conventional social science methodology courses is often so low, and the literature is so often ill-written and off-putting that it is hardly surprising that students react the way they do. Two things emerge from these books—first, that good texts can be, and are being, written, and secondly, that we may continue to expect many of the better presentations to come from those outside the field, at least until the mathematical training of sociologists and others is much improved.

A. P. M. Coxon

Be a pioneer

Women in Mathematics
by Lynn M. Osen
MIT Press, £5.00
ISBN 0 262 15014 X

Here is a slender book whose size reflects the very regrettable fact that there have been so few women in mathematics. Lynn Osen gives short biographies of eight of them, ranging from Hypatia who was born in 370 to Emmy Noether who died in 1935. She shows them as women of enormous determination; there were those who followed their interest in mathematics despite very considerable discouragement from people around them, and those who were refused instruction and recognition by universities.

Against this background, Lynn Osen turns to the position of women in mathematics today: why are there still so few? At this point she moves into an area where there are many firmly held convictions but rather fewer hard facts. She takes her evidence mainly from the United States but many of the parallels answers she suggests could very well be studied in an attempt to explain the marked lack of interest in mathematics shown by girls in this country.

She draws attention to the social pressures (inside as well as outside school) which can persuade a girl that to study mathematics is unfeminine and also to the form of presentation of the subject in textbooks which relates it more immediately to boys' interests than girls'; she discusses the uncertain career prospects for women—not only in mathematics itself but also in other subjects for which mathematics is an essential tool.

This is perhaps a book containing more of interest for those concerned with the education and careers of women today than for those seeking to assess the significance of the mathematics done by women in the past.

Margaret E. Rayner

The foundations of physics explained

Quantum Gravity: An Oxford Symposium
edited by C. J. Isham, R. Penrose and D. W Sciama
Oxford University Press, £10.50
ISBN 0 19 851943 5

Of the current sets of ideas of theoretical physics, the two most fruitful are, it may be claimed, quantum field theory and general relativity. They deal with fundamental ideas of physics—yet to many physicists and to almost everyone else who is not a physicist they are incomprehensible. Both find their origin in the special theory of relativity.

Quantum field theory began when Dirac set up an equation for the electron which satisfied quantum conditions on the variables and did not change when it was transformed in ways consistent with special relativity. Dirac's achievement led to a deep and extensive theory of the interaction of matter and radiation, which is very successful at low energies but which, despite current encouraging indications, has so far been unable to give an adequate account of the interaction of matter and radiation at very high energies. Thus, quantum field theory predicts with high precision the fine details of the spectrum of atomic hydrogen but fails to explain the interaction of electrons and positrons at energies in intersecting storage rings.

Einstein himself developed general relativity, the other major theory to evolve from special relativity. It has proved very successful in describing gravitational fields on a cosmic scale and the interaction of electromagnetic radiation and gravitation, and the majority of astronomers and physicists would accept the more readily than rival theories of gravitation and the structure of the universe. But general relativity is not a quantum theory and most physicists consider that all physical variables should satisfy quantum conditions.

A major question of theoretical physics is, therefore, whether general relativity can be quantised—if there are gravitational waves, are there corresponding quantised gravitons, just as there are quantised photons corresponding to electromagnetic waves? On the other hand, should not quantum field theory be expressed in a form consistent with general relativity, with the metric of the coordinate system depending on the local density of energy and momentum? A further problem has arisen in recent years—it is well known that the gravitational field is singular in the neighbourhood of sufficiently large masses leading to the so-called "black holes" from which radiation cannot escape, and the question is, whether black holes may be in some sense quantised.

The relations between the ideas of quantum electrodynamics and of general relativity thus seem to lie at the roots of the ways in which we attempt to systematize and understand the interactions of matter and radiation on the very small scale—the internal structure of the proton, for example—and on the very large scale—the structure of the universe. Clearly then, those ideas are important to physicists. At the same time, they are both unfamiliar to most physicists and of great difficulty in conception. The fact that few of the problems posed by attempts to quantise general relativity or to put quantum electrodynamics in a general relativistic form have been solved, is as much due to the difficulties involved in stating the problems as to the mathematical difficulties of handling them.

Thus, although a book on quantum electrodynamics should be of great interest to all who try to follow current ideas in theoretical physics, he would be rash who would claim that the present book will be widely read, or it is written by specialists, by those engaged in demanding research and it will be of particular value for those able mathematicians who wish to take up research in quantum gravity.

The papers in *Quantum Gravity* were read at a symposium held at Rutherford Laboratory in February, 1974. The first, by C. J. Isham, introduces the main topics taken up by the other authors and should be followed by anyone who understands the principles of quantum mechanics and general relativity; it will give some ideas of the main topics to physicists, astronomers and mathematicians who want a general view of what the issues are. The subsequent chapters are far more technical, there are eight of them, and if one should suggest a few to the "general reader" on account of the likely importance of the ideas in the future, they would probably be "Particle Creation by Black Holes" by Stephen Hawking, "Twistor Theory, its Aims and Achievements" by Roger Penrose, "Impact of Quantum Gravity Theory on Particle Physics" by Abdus Salam and "Is Physics Legislated by Cosmology" by G. M. Patton and J. A. Wheeler. Effort spent on trying to grasp the ideas in these four papers will be rewarding.

Anyone with a serious interest in the foundations of physics should at least dip into *Quantum Gravity*, although just dipping will take some intellectual effort. It is required reading for those embarking on research in the field.

A. H. Cook

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BOOKS



An engraving by the Dutch artist F. H. van Houe (1628-98) of an eagle owl and a long-eared owl which appeared in Ornithologiae Libri Tres by Francis Willughby, London, 1676. From The Book of Birds: Five Centuries of Bird Illustration by A. M. Lysaght, Phaidon, £20.00.

Hunch-back villain?

Richard III and His Early Historians, 1483-1535
by Alison Hanham
Clarendon Press: Oxford University Press, £8.50
ISBN 0 19 822434 6

The evolution of Shakespeare's view of Richard III as a hunchbacked villain has long intrigued scholars. However, since 1936 when Dr C. A. J. Armstrong published *The Usurpation of Richard III* by Mancini, who visited England during Richard's reign and wrote within three or four months of the battle of Bosworth, it has been generally recognized that Richard's bad reputation originated with his illegal seizure of the crown. Little was left for the Tudor propagandists to do except elaborate a pre-existing legend.

Dr Hanham reaffirms this view and by the use of documents, letters and chronicles tries to find the reality behind the legend. As she herself admits, the search is hampered by the conflict of evidence surviving from Richard's reign and the period immediately following, which is fortuitously incomplete and/or intentionally biased. Nevertheless, Dr Hanham assembles a valuable collection of source material, discusses in detail its transmission, and provides her own translations of crucial texts, notably the sections on Richard's reign in the Crowland chronicle (of which no modern translation exists) and in John Rous's *Historia* (hitherto untranslated).

As a piece of research Dr Hanham's book is on the whole impressive; as a work intended to persuade the reader, it is less successful. Much of it is heavy reading, despite occasional witticisms, colloquialisms and chatty footnotes, and its structure is impaired by licenced digression—e.g. the excursuses which follow most chapters). More serious, Dr Hanham tends to pursue her theories at greater length and with more certainty than the evidence seems to warrant.

Although the main texts have been exhaustively discussed and some excellently edited, Dr Hanham is sometimes cavalier in her treatment of the views of previous scholars; that, for example, of C. S. Lewis is swept aside. (Even Sir Thomas More is not spared: his advice to his children on how to write Latin is dismissed without explanation as "unsound".).

Dr Hanham concurs with the generally accepted opinion that the author of the second continuation of the Crowland chronicle was an administrator and diplomat of Edward IV; she argues in addition that the monks of Crowland obtained this memoir of Edward's reign and worked it into their abbatial history. Her contention would be corroborated if, as she argues, Polydore Vergil also used this memoir, for he would have acquired a copy independently of the Crowland monks. Dr Hanham demonstrates the parallels between the two works, which include a few verbal echoes. However, her arguments are not conclusive: similarities between chronicles can easily result from the use of common sources, both written and oral. (The same objection can be made to Dr Hanham's assertion that Sir Thomas More used Vergil for his *History of King Richard III.*) And the possibility remains that the author of the memoir wrote in retirement at Crowland, in the same way as Thomas Wykes had written his account of Henry III's reign when he retired to Osney abbey after a career in Richard Earl of Cornwall's service.

Dr Hanham has an interesting chapter on More's *History*. Nevertheless, I suspect that she overstates its satirical element. Emphasis is placed on similarities with the *Utopia*; but while the latter is certainly a "Lucianic" work, the *History* is less deserving of that epithet bestowed on it by Dr Hanham, because it belongs to a different literary genre. The reader might expect to find the *History* a series of satirical jibes, for in it, Dr Hanham alleges, More "put his scurrility to joyous use", writing "something approaching a comic history" (elsewhere "an imaginary history") in which King Richard appears as "a buffoon". She argues that More intended not only to satirize Richard and his reign, but also, by the meticulous weighing of oral evidence, to parody the historian's art.

Such treatment obscures the fundamental seriousness of the *History*. More, deeply moved by the scandalous reign only a generation earlier, used satire—and fiction—to reinforce his polemic against tyranny, Richard's in particular, in order to move the reader. His meticulous weighing of oral evidence was surely intended to achieve authenticity—to get behind wild rumours.

As the volume lacks a bibliography, it is hard to say whether the secondary reading is complete. However, there is no reference, for example, to Professor M. Levine's article in *Speculum* (1959). Nor does it seem likely that Dr Hanham would have described Rous in such derogatory terms ("an old-fashioned antiquary rather than a historian—a busy-minded gossip") had she read Sir Thomas Kendrick's *British Antiquity*. Her discussion of Rous's hostile attitude to Richard III expressed in the *Historia*, written early in Henry VII's reign, would have been improved by reference to his two Warwick rolls; in that executed under Richard, Rous eulogizes him with the same fervour as he later employed in his vilification.

Antonia Gransden

Salvation of the church

The Church of Ireland, 1869-1969
by R. B. McDowell
Routledge & Kegan Paul, £3.75
ISBN 0 7100 8072 7

Dr McDowell's concise book covers the history of the Church of Ireland in the century after disestablishment in 1869. The central part of his thesis is that disestablishment, which Irish churchmen regarded as an unforgivable offence on England's part, in the end proved to be the church's salvation. Church and state in Ireland were bound to be severed sooner or later, since the established church represented only about 13 per cent of the population. It was fortunate for the Church of Ireland that it was disestablished by Gladstone, himself a devout Anglican, who was anxious that the church should not suffer undue hardship. Had disestablishment been delayed until the age of the Nonconformists, Lloyd George, on the triumph of the southern Irish Catholic democracy in 1922, it is doubtful if the church would have been handled with such a tender fashion.

Moreover, after disestablishment the church's members, lay and ecclesiastical, rallied in support of their venerable institution. The Church of Ireland had a large membership among the landowning classes at a time when landlords were still a rich and influential part of Irish society, and funds were quickly forthcoming. But it was not only financial support that was needed. For the church has now to put its own house in order and perhaps the most illuminating part of Dr McDowell's book is where he describes how the Church of Ireland was transformed from the pre-1869 Trollopian church to a modern reformed and reconstructed organization.

The reforms thrust upon the Church of Ireland by disestablishment involved increased lay participation in church government, and this left the church vulnerable to schism, especially over issues always a touchy subject in a predominantly "low" church. But the Church of Ireland, Dr McDowell explains, endeavoured successfully to maintain a "cautious dissent from extremes", and the divisive wish for its ranks were never irreparable. However, this admirable dissent from extremes meant also that the church was, perhaps, less adventurous as an approach to social problems than it might otherwise have been. Indeed the essentially "middle-class" nature of the church resulted in some of its most brilliant graduates making their careers outside Ireland.

Since 1922 the Church of Ireland has existed in two separate states and has had to contrive the preservation of having most of its organizational machinery based in the south, while most of its members live in the north. Dr McDowell pays tribute to the devotion of a church which has coped, on the whole successfully, with the enormous problems posed by this situation, and even when the church was cut off from contact with people who were thinking in the manner of the twentieth century", many of its adherents in the north were, as Dr McDowell remarks, still untouched by "gassings supplied with each of the centuries". Unfortunately, he does not investigate this serious failure in communication between the church and many of its members. Irish politics, which has had profound consequences for contemporary Ireland, would, perhaps, require a treatise to itself, but such an investigation would, perhaps, require a methodology of the sociologist rather than that of the historian. McDowell's elegant and sympathetic treatment of Irish episcopacy shows that the Church of Ireland has been fortunate in her bishops, even if she still awaits a sociologist.

D. A. Hay

BOOKS

The road to chop suey and chips

Emigration and the Chinese Lineage: The "Mans" in Hong Kong and London
by James L. Watson
University of California Press, £5.50
ISBN 0 520 02647 0

There is a long tradition of anthropological interest in China, but since the Chinese Revolution of 1949 field-workers have had to go elsewhere, to Taiwan, Hong Kong, or to one of the ever-growing number of overseas Chinese colonies, for new data. James Watson chose to go initially to San Tin, a single-lineage village in the New Territories of Hong Kong. San Tin was chosen specifically for it is an emigrant community—85 to 90 per cent of its able-bodied men work in Chinese restaurants abroad and the community is almost entirely dependent on their remittances for economic survival—and Watson set himself the task of not simply producing yet another ethnography of the already well-documented, single-lineage village in South China but of studying the entire process of migration and producing a model of the causes and effects of emigration that would be applicable not just to Chinese society but to other societies with a tradition of labour out-migration as well.

In one way his study is unique, at least among Chinese ethnographies, for though he concentrates primarily on the home community from which the emigrants come, in itself a rare research tactic, he also follows members of the Man family to the United Kingdom in order to investigate their adjustment to the host society.

Watson uses a "push-pull" model to explain the causes of migration, a model which is perhaps too simplistic. Economic necessity provides the "push", the lure of opportunity the "pull" that begins the process of migration. In the case of San Tin, the "push" occurs when the more traditional rice-growing agricultural and economic system gives way before the more profitable vegetable farming practised by refugees from across the border. The land owned by the Man lineage, brackish and marginal, is no longer adequate. With economic disaster approaching, the Mans begin to go abroad to work in restaurants owned by other lineage members: push-pull.

But is it so simple? Are the Mans helpless victims of circumstance? Bits of ethnographic data supplied by Watson suggest that the answer is "no". Many of their choices are dictated not by what is economically possible but by what is easiest and requires the least work. Previously they grew "red rice", a less time-consuming task, and augmented their agricultural income, and gained a good deal of their social prestige by running what Watson describes, accurately, as a "protection racket", playing on their corporate reputation for ferocity. They also engaged in smuggling, and do not seem, on balance, a typical, traditional community. In 1955, when the transition to emigration began, the community had other options open. They could have improved their land and became vegetable farmers as other communities did, but this type of farming was deemed "less honourable" and not in keeping with the Man's high status. Poultry farming and fish farming, other alternatives, were rejected for similar reasons. It is clear that the Man's emigration can only partly be explained by the economic conditions; attitudes, values and perceptions played a large part in their decision. However, these cultural influences on Man behaviour are never examined in any systematic way.

There are other difficulties with the model. The first wave of emigrants were not the poor farmers, as one might expect. According to Watson, the first wave comprised wealthier individuals with entrepreneurial experience and the capital to open restaurants. One wonders if these "entrepreneurs" are "pushed" and "pulled" by the same forces that influence later waves of workers.

Watson's material on the transformation of the lineage is far more convincing. He describes how the lineage modifies its function to provide loans for air fares, job placement, even charter flights for its members as they emigrate abroad. This transformation will be of special interest to students of Chinese society as it has been the theoretical position that corporately owned land was essential to maintain the power and authority of the lineage. Watson shows that it is not the land *per se* which is important but control of the means for economic survival. Rather than crumbling with the devaluation of its land, the Man lineage proves flexible and alters its structure to continue to provide economic advantage to its members, though in a different form. His description and analysis of this process is excellent.

Finally, the author points out that far from being the force for "progressive" change which everyone generally assumed, emigration could equally produce, as it did in Sun Tin, a trend towards "conservative change", a dynamic restructuring of institutions to perform traditional functions and to reassert traditional values. His concept, "conservative change", is a reaction to the connotations of "progress" which Watson says anthropologists imply when they use the word "change". I do not think his assessment of anthropologists' addiction to the concept of "progress" is accurate and I cannot see how this new idea differs from the concept of "revitalization" adumbrated by Anthony F. C. Wallace several years ago and now in common use.

It seems almost specious, however, to quibble over whether change stemming from emigration is progressive or conservative while standing in the midst of a community, Sun Tin, in which the institution of marriage is changing, the family is in disarray, modified child-rearing practices are apparently only partly successful and children and adolescents are getting out of hand—only a few of the ethnographic features noted. A few festivals, organized by the elders of the community, seem weak evidence of a cultural revitalization.

On balance, while I do not find his theoretical models particularly exciting, Watson's ethnographic material and his description of the process of emigration are outstanding. His book, added to other work done in the New Territories by Potter, Baker and Ward, completes the ethnographic description of the society of South China.

Edward Moody

Wife-givers and wife-receivers

Kinship, Descent and Alliance among the Karo Batak
by Masri Singarimbun
University of California Press, £8.10
ISBN 0 520 02692 6

This monograph is both a contribution to the ethnography of the Karo Batak, all the more significant because Dr Singarimbun is a Karo Batak himself, and a contribution to the long running and at times confusing debate over the existence and nature of "asymmetric prescriptive alliance systems".

For Singarimbun, the concept of "prescriptive asymmetric alliance" has a very particular meaning. He claims that such a system must involve the existence of corporate unilineal descent groups between which there is a distinction between wife-givers and wife-receivers, and between which affinal relationships are repeated, a man marrying his mother's brother's daughter or at least some woman in her descent group.

But, amongst the Karo Batak, the author claims that there are no descent groups between which alliances can take place, and that if one examines actual marriage choices, there is no tendency for the repetition of pre-existing affinal relationships. As a result, he claims that the Karo Batak do not practise asymmetric prescriptive alliance and goes so far as to claim that the whole concept is "factitious". Singarimbun then proposes an analysis of Karo Batak kinship and marriage which focuses upon the relations between a woman's family of orientation and her family of procreation. This relationship, plus the relationships which exist within the nuclear family are, he claims, the basic structural principles of the society. Those principles are then extended outwards to include more and more distant members of the society, and really distant relations are only classed as wife-givers or wife-receivers purely as a matter of "politeness". Singarimbun's own analysis is supplemented by an analysis of the Karo Batak kinship terminology by Dr Schefflер who comes to the conclusion that the terminology does not imply asymmetric alliance and also implies that such systems do not exist.

How one assesses the success or failure of this monograph depends ultimately upon one's theoretical predilections: whether one prefers the holistic analyses of the alliance theorists or the methodological individualism and empiricism of Singarimbun. But to me, the author fails on at least two counts. He fails to deal in a comprehensive fashion with the alliance theorists, and he fails to produce a satisfactory analysis of his own rich ethnographic material.

Singarimbun is content to produce a rather simplified version of alliance theory and the concept of prescriptive asymmetric alliance, lumping together authors such as Dumont, Leach, Lévi-Strauss and Needham who define and use the concept in very different ways. It may be true that in the early works of both Needham and Lévi-Strauss there is a tendency to assume the empirical existence of alliance groups, the actual repetition of marriages between such groups, and a concrete distinction between wife-givers and wife-receivers. But such a position is not true for Dumont, and indeed, Dumont has attacked this sort of empiricism as a "substantialist fallacy". The alliance theorists are much more concerned with collective representations and the way in which these collective representations are employed to order and talk about social relationships than Singarimbun would seem to admit.

It is this failure to come to grips with alliance theory in general which leads to misunderstandings in the analysis of the ethnography presented in this volume. There are some fascinating descriptions of traditional house architecture, of myths, and of mock marriages between cross-cousins which are used to heal sick children. Yet these pieces of ethnography are presented in a loose and uninterpreted fashion. In terms of the author's theoretical approach, these pieces of ethnography do not really make much sense. Furthermore, in his efforts to find support for his "extensionist" approach, Singarimbun is forced to make distinctions between kin which the Karo Batak themselves do not make, such as his distinction between wife-givers by birth and wife-givers by marriage. One has the feeling that the data is being forced into a theoretical framework which is not really suitable, and that an approach based on the work of the alliance theorists would make much more sense. Presumably for a "correct" analysis we shall have to await Needham's reinterpretation of Singarimbun's material.

R. L. Stirrat



The samurai fails, and he and his sword are destroyed by gunpowder in this illustration from The Nobility of Failure by Ivan Morris, published by Secker & Warburg at £6.50. The book recounts the lives and legends of Japan's most notable tragic heroes who, despite their courage and determination, fell to the superiority of material forces. The book ends with the story of the kamikaze pilots of the Second World War.

Dialectical Anthropology

Editor: STANLEY DIAMOND, New School for Social Research, New York

This journal is a significant episode in a wider effort to resurrect and redefine the Marxist tradition; and it constitutes the beginning of a comprehensive critique of the anthropological aspect of academic social science. The undertaking is critical and dialectical, both with reference to method and praxis. Its purpose is the revolutionary reconstruction of contemporary Western civilization in all its basic, related aspects; the dialectical method and the deep historical perspective illuminate the need for, while contributing to, that end.

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GEOARCHAEOLOGY

Edited by Donald A. Davidson and Myra Shackley

An important trend in recent archaeology has been the application of techniques from the physical and biological sciences. This book illustrates the relevance to archaeology of earth science, a topic which has been insufficiently emphasised in the past. It is necessarily interdisciplinary, and contributions are drawn from such varied disciplines as archaeology, geography, geology, geomorphology, physics, soil science and other environmental sciences, the common concern being the reconstruction, by means of specialist techniques, of former environments.

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Edited by J. Friedman and M. Rowlands

Evolutionary theory, which has long held an important place in social anthropology, has been modified in recent years by developments in ecology, systems theory and biology. Anthropologists have also become more aware of the importance of time spent in the study of social systems, and so more aware of the interrelations of general social theory and anthropology's close connection with history and archaeology. This book gives the results of a seminar held to discuss problems in evolutionary theory and to clarify and develop models for social evolution that could be tested against a range of ethnographic, historic and prehistoric data.

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BOOKS

Hunt the symbol

The Interpretation of Symbolism
edited by Roy Willis
Malaby Press, £6.75
ISBN 0 460 14004 3

This volume contains six essays presented at one of the sessions of the special decennial conference of the Association of Social Anthropologists of the Commonwealth held at Oxford in 1973. Four of the essays are by Americans, indicating an increasingly international cast to what was once a nearly British organization. This also encouragingly suggests an increase in common theoretical interests in a discipline long divided by the Atlantic. There is not, however, any clearly discernible theme uniting these particular papers, nor is the editor's brief introduction helpful. Nevertheless, for those interested in the study of symbolism, half of the papers are of considerable interest.

The papers by James Fox, David McKnight and Michelle Zimbalist Rosaldo and Jane Monnig Atkinson merit special attention. What has weakened much analysis in the study of symbolism has been the poor quality of the data on which such interpretations are based, so that these three useful essays are especially welcome in that they demonstrate a combination of searching and provocative analysis with excellent ethnography.

Fox analyses ritual chants among the Rotinese of eastern Indonesia, a subject to which he has already contributed several stimulating papers. This one explores the nature of parallel themes (a phenomenon which has already attracted considerable attention from students of oral and biblical literature) as a means of discerning the principles behind the distinction and syntheses of conceptual categories. The richness of Fox's data and his impressive grasp of language involved allow him to demonstrate how perplexingly complex and subtle such associations may be. By way of presenting his data, Fox provides an extremely useful set of tentative methodological suggestions for its statistical analysis. His main aim is to contribute a method of establishing a hierarchy of significance among various motifs within a system of dual classification. This is one of the few sensible discussions of statistical method by a social anthropologist. It recognizes that these techniques are essential for dealing with such complex material but never loses sight of their limitations, confined as such techniques ultimately must be, within the broader evaluations and perceptions of the fieldworker who, one hopes, has perceived the style or form of a particular culture.

Rosaldo's and Atkinson's essay is also rich in ethnographic detail. It begins with an exposition of the modes of symbolism by which the Ilongorot of Luzon formulate various magical incantations. The authors develop their material so as to pose questions about possible differences in the kinds of symbols associated with men and women within a culture. In doing so they ask the reasons for the apparent universality of male symbolic dominance within the cosmologies of all cultures. Their concluding attempts at generalization beyond Ilongorot society seem weak and at times questionable. For example, the Hindu goddess Kali is surely a well-known illustration of a conjunction which they imply does not exist, that of femininity and destruction. Furthermore, they have a tendency to beg the argument in terms of the sort of simplistic reductions of cosmologies and entire cultures into the pat binary oppositions popularized by Lévi-Strauss: males-females, culture-nature, and even wilful transcendence of the body through homicide-passive submission to physiology through motherhood. Yet these heady flights of speculation seem merely appended to what remains a provocative paper directed toward profound questions about the universal bases of symbolic systems.

McKnight's paper examines the forms and bases of certain sexual avoidances and prohibitions practised by the Yolngu of Arnhem Land, Australia. It shows how these symbolic social actions make sense when they are seen as ordered reflections of those basic categories of classification of nature and society which constitute Wikmungkan cosmology. The article is more cogently presented than the material in the two essays already discussed, but the inherent fascination of the Australian material (of considerable interest to all anthropologists on account of the vast theoretical capital already invested in Australia's peoples) and the author's attractive and clear style make this an absorbing exercise.

Two of the remaining essays require little comment. Anthony Jackson's paper considers symbolism among the Na-khi of the borderland between southwestern China and Tibet. He attempts a structural analysis of mythical themes in order to support his argument for the existence of an earlier matrilineal system with prescriptive marriage rules. His discussion presents a bland of the classic doctrine of survivals along with Lévi-Straussian theories about symbolism as a cathartic response to a dysfunctioning social system. Oddly none of the structuralists is cited even though some of their ideas on symbolism and prescriptive alliance would seem directly related to Jackson's problems.

In any case, the data are presented in such a disjointed and confusing manner that interpretation remains vague and unconvincing, though this is not to say that Jackson's points may not be valid. Renato Rosaldo's paper discusses the problem of translating a native Ilongorot kin term into a comparable English anthropological term that might allow useful cross-cultural comparison. As presented the issues have almost no direct bearing on the study of symbolism, unless we are to consider any and all terms in all cultures as symbols. Rosaldo centres his argument around an attack on those who might crudely translate this Ilongorot term as "unilineal descent group" and concludes with a plea for more flexible, relativistic, problem-oriented translations of indigenous terminologies and for less preoccupation with all-inclusive definitions. While such points are well taken, it all seems a bit like trying to flog a dead horse back into life and no longer worth such an extended and sanguine contention, especially after digesting many of the other essays on kinship already sponsored and published by the ASA —work he never cites.

The final essay, by Sherry Ortner on ritual among the Sherpa of the Himalayas, is unsatisfactory on many counts, yet the editor singles it out as "a model of what a holistic interpretation of social symbolism should be". It presents a tidy package of glib ethnographic stereotypes that allow the author to "diagnose" the purported internal ills of Sherpa culture. In this it resembles the worst abuses of the psychologizing anthropologist as self-elected diagnostician and pathologist, exemplified by such authors as Mead on the quarrelsome Mundugumor, Nadel on the witch-ridden and sexually-threatened Nuba, and Kluckhohn on the frustrated Navaho. Ortner's own ethnographic evidence seems quite thin, and we are left to wonder on what she bases her broad assumptions about the troubled mental states and anxieties she suggests are rife among these people. It is generally considered unfair for an anthropological critic to question the ethnographic evidence reported by a researcher. Yet surely the Sherpa would be unique if indeed "Sherpa social structure does not provide channels for dealing systematically with socially disruptive behaviour", so that they suffer from "general social paralysis in the face of socially threatening situations". Much of Ortner's argument hinges on her picturing the Sherpa as prisoners of their own contradictory and therefore dysfunctional idea system, so that there is "a culturally engendered confusion . . . about the locus, meaning, and sources of anger".

There may well be a grain of truth in any such comment for some people in any society, but these assertions here pass for some kind of meaningful and valid sociological generalizations. In the end, it is difficult to know what the author means, for she concludes by asserting that she has no intention of interpreting ritual in terms of catharsis and then proceeds in the same paragraph to do just that, although in phraseology of such obfuscating jargon that the contradictions may have escaped her.

This collection contains equal measures of commonsense and muddle, solid ethnography and unwarranted assertion. What does seem clear is that whatever methodological tools we may require to fathom the nature of the symbolism and cosmologies of the world's diverse cultures, these cannot possibly derive from the either implied assumption that we must consider "the abandonment of the comforting assumptions implicit in classical anthropology that all non-Western cultures can be accounted for within the conceptual resources of Western natural and social sciences."

T. O. Beidelman

The social sciences' dustbin?

Consciousness and Change
by James L. Peacock
Blackwell, £5.50
ISBN 0 631 16126 1

Meaning in Culture
by Allan F. Hanson
Routledge & Kegan Paul, £3.95
ISBN 0 7100 8132 4

Anthropology is not short of "facts". It has a rather embarrassing *richness* of them. What it does lack is a general interpretative framework within which to view them and give them meaning. James Peacock's *Consciousness and Change* offers a highly personal attempt to synthesize many disparate elements of the anthropologist's methods to provide an evolutionary perspective on symbolic systems. He has read widely and adapts eclectically, for he terms anthropology "the gamekeeper of the social sciences". He starts with a well-argued synthesis of Durkheim, Turner, Douglas and Gluckman, to establish an "evolutionary trend", from societies with multiple relationships operating rituals of social relations to societies of unifunctional relationships without such rites and governed by aesthetic not moral norms. A discussion of the standard approaches of anthropology to myth follows, which Peacock neatly reduces to a homology between social and cultural planes, and then to a disparity between the two orders, as studied by Weber, followed by a shift from rite to ideology and collective to individual.

Inasmuch as the challenging questions raised by anthropology are ultimately questions of philosophy, Dr. Hanson's *Meaning in Culture* offers a valuable introduction to basic issues. He is aware that he is no more than touching on some rather complex matters, hence the somewhat unusual format whereby each section is divided into "Main text" and "Further remarks". The discussions of rationality, understanding and culture and behaviour are excellently clear and concise while the presentation turns the book into a collection of essays. One of the main problems is that Hanson sticks do close to the "facts on the ground" that his view of "implicational meaning" turns into a sort of intellectual functionalism, not eyed sharply discriminating between logical and causal implications and depicting culture simply as a series of propositions *not* as a code. Dr Hanson has the rare gift of making the complex seem simple in an area where many of his colleagues are possessed of the opposite tendency.

Nigel Barley

BOOKS

Once a nomad, always . . .

Pastoralism in Tropical Africa
edited by Theodore Monod
Oxford University Press, £7.50
ISBN 0 19 724196 4

To African governments, anxious for the material advancement of their peoples and seeking to establish a stable administration with which to implement it, nomadic pastoralists must seem a nuisance and the complexities of their distinctive cultures an irrelevance. Yet they cannot be ignored because they occupy a large proportion of many states, areas from which the costs of administration and welfare services, including famine relief, are not recoverable by an archaic system of land use. It was appropriate that the International African Institute should call a conference on the specific features and development of pastoral societies at Niamey, Niger, in a country containing little else. Seventeen of the contributions are here published in French or English with summary translations and a long introduction and discussion of the contents by Monod himself is printed in full in both languages.

The authors are distinguished, with much fieldwork, and often numerous publications, to their credit. As would be expected they provide a useful selection of case studies and thematic discussions on social change and disruption occurring among such peoples as the Fulani groups, the Twareg, Zaghawa, Karamojong, Turkana, Boran and Massai. Common themes are sedentarization, relationship with neighbouring cultivators and the decay of hierarchical relationships. On the whole these peoples are shown as adapting to changed conditions rather than seizing new opportunities. Competition with sedentary peoples for grazing lands is increasing as new economic values allow extension of cultivation and as they themselves acquire livestock contrary to the traditional division of functions. It has intensified with the increasing political influence of the sedentary groups in most of the states. This is one of the factors leading to overgrazing but it is rightly pointed out that this is generally due to overpopulation rather than a wilful maintenance of too-large herds. To avoid disaster either the productivity of the grazing must be increased or an alternative means of livelihood provided, within the same region or by migration. The authors have little to say on this dilemma.

Admirable though the special studies are, they form a less coherent collection than it should have been possible to achieve by a more problem-oriented conference. The apparent inability of the pastoral societies to make the necessary transition from management of their herds to that of their grazing lands is a central problem to which the social changes chronicled in these papers could have been more explicitly related. In addition to its practical utility, this would have raised conceptual issues, including the homogeneity of these social structures, their differing perceptions of the environment and the role of the individual innovator—dare one say entrepreneur?

A more integrated approach is provided by Monod's summary of pastoralism as a system with ecological and economic as well as social dimensions. He goes beyond the relatively restricted scope of the other contributions and refers to such matters as carrying capacity, quoting work by Gauthier-Pilters and Leslie Brown, which provides valuable insight into the material bases of this way of life. It is a corrective to the lack of consideration of the environment by other contributors exemplified by the curious lack of maps in a study of these land-bound societies. The five illustrations include two diagrams of lineage but only one map.

The technical problem of productivity leads to the question of the exchange of the products within the market economy from which these societies can no longer be isolated. Remote and different the pastoralists of Africa may appear, but they live on the same shrinking earth as the rest of us. This volume chronicles the symptoms and provides a rather partial diagnosis of the strains to which their social systems are being subjected.

W. T. W. Morgan

Convenient marriages

The Piaroa: A People of the Orinoco Basin
by Joanna Overing Kaplan
Clarendon Press: Oxford University Press, £8.00
ISBN 0 19 82319 X

In her introduction to *The Piaroa*, Joanna Kaplan observes that one reason why so much anthropological debate over the "true meaning of kinship" and over the nature of prescriptive marriage systems has been sterile, is that the people concerned have often ignored an obvious point: questions phrased in terms of the workings of a particular society will require different modes of analysis and produce different kinds of answer, from those phrased in comparative and taxonomic terms. Her own book treats both kinds of question. Most of it is devoted to a thorough and highly detailed analysis of the principles accounting for the fluid and varied composition of Piaroa local groups. Then, drawing upon this analysis, the principles of Piaroa kinship and affinity are examined in a comparative framework.

The Piaroa live in the middle Orinoco region in small, widely dispersed settlements. Each settlement is a multifamily house formed around a man who combines the roles of shaman, priest and political leader. These leaders compete with each other to extend their influence and to enlarge their households. Ideally, all marriages should take place within the local group but in practice things are more complicated. One reason for this is that, like the kings and queens of European history, Piaroa leaders play politics through and in terms of marriage.

Wisely, Kaplan takes a broad view of both kinship and politics. She shows clearly that the composition of Piaroa households must be understood by looking not only at the principles of kinship and marriage, but also at the use to which they are put in political machinations. Her account of the way in which marriage arrangements are used by one leader to score over his opponents is one of the most interesting parts of the book. Her discussion of the role of power based on knowledge of the supernatural in Amerindian politics is an important contribution to a long-neglected field. But is her approach broad enough? It might be suspected that economic factors would influence choice of residence and tantalizing glimpses suggest that this is indeed so. But nowhere are such factors given more than cursory consideration.

The comparative part of the book makes a significant contribution to a debate concerning the workings of prescriptive marriage systems in societies which lack an ideology of descent but combine kindred-based groups with an ideal of endogamy. In particular the work both complements and extends Rivière's arguments based upon the culturally similar and not-too-distant Trio. Kaplan argues that in these societies, it is the repeated marriages within one group that give it both structure and continuity through time. This represents the most aromatic social structure possible.

The book is hard to read, not through being badly written, but because it makes use of extended case material. By the end, you feel you know a number of Piaroa personally—and unless you do the argument can be hard to follow.

Stephen Hugh-Jones

Mafia island

Choice and Constraint in a Swahili Community: Property, Hierarchy and Cognatic Descent on the East African Coast
by Ann Patricia Caplan
published for The International African Institute by Oxford University Press, £6.80
ISBN 0 19 724195 6

The village of this study is located in the northern part of Mafia Island which lies off the coast of Tanzania. Its population, of nearly a thousand people, is fairly homogeneous ethnically, culturally and economically. Though there is a marked Arab culture the villagers are almost entirely Africans, of either "free-born" Mbwere or Pokomo slave descent. Rice and cassava are the primary subsistence crops; agricultural land is not generally in short supply though some plots are more sought after than others. Coconut trees are the source of cash and the number of trees owned is very varied. Lifestyles are similar but incomes and prestige are dissimilar.

The book is about the control of scarce resources (one of which is prestigious pedigree) and power relationships. Ann Caplan begins her analysis by examining the ideology and operation of the village's six named, unrestricted, cognatic, corporate descent groups. Because of unrestricted recruitment many individuals can choose through which descent group they will activate claims to land, trees or congenial residence. Situations are created in which the actors have to make apparently individual choices, but all within a similar and comparable range of economic and social constraints.

Then the author examines personal networks, patterns of land and tree holding and the relationships which can be discerned between descent group membership and leadership of Islamic congregations and of spirit possession activities. She constructs a model for each of these factors and makes an attempt to construct an overall statistical model and to compare it following Keesing and Scheffler, with a decision model built up as the narrative unrolled. Caplan suggests that to contrast models in this way shows up the discrepancies in each and has heuristic value.

The book enlarges, with fuller numerical data and apt illustration, the arguments Dr Caplan put forward in *Man* in 1969. The most promising addition is the information about personal networks, through which links are made between different groups. Where there are few men who can wield power through authority or the inheritance of significant economic assets, then social power and influence are likely to accumulate around those who can, through good husbandry, cultivate and crop their personal networks. It is in that area of social relationships that data which would flesh out the analysis could be sought, as Gulliver on the Ndendeuli and Hoben on the Amhara have recently done when they considered comparable problems. But it is just here that one is left unsatisfied. The few pages on networks do not tell much about the quality or strength of the strands. Affinity is really only mentioned in passing. This is not a simple plea for more minutiae of social life, and certainly not for gossip dressed up as social fact, but to comprehend choice one needs to know a fair amount about the choosers and the social contexts in which they make their choices. A sensitive combination of the extended case and the network approaches might have made the relationship between property and power clearer and more dynamic than does the reshuffling of census data. A strength of network analysis is its capacity to elicit and to order social intricacy through an examination of the interlinkages between structural features and numerical categories. There are too many figures and not enough people. Dr Caplan must have such data in her notebooks. If she has chosen to withhold it it seems an error: it seems more likely, it has been squeezed out by publishing costs then it will hold back the accumulation of data on societies subjected to rapid change.

P. T. W. Baxter

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BOOKS

Rape, rape . . . I've not been raped

The White Women's Protection Ordinance : Sexual Anxiety and Politics in Papua
by Amirah Inglis
Sussex University Press, £3.00
ISBN 0 85621 049 8

In 1926 the Australian colonial administration of Papua passed The White Women's Protection Ordinance, a decree not repealed until 1958, which declared the death penalty for the rape or attempted rape of a European woman. This is despite the fact that as of 1926 not a single case of rape of a European had been brought before the courts, nor had there been evidence to support a case of attempted rape. Amirah Inglis in her monograph on this piece of legislation describes in great detail the sequence of events leading up to and following its passing ; in so doing, she presents us with a fascinating and in-depth case study of race hysteria within a twentieth-century colonial setting.

To illustrate the racial climate of colonial Papua, Inglis details certain legislative steps preceding the extreme law on rape and attempted rape. The particulars of these laws will surprise no one familiar with a racist society, be it South Africa or the traditional South of the United States: Papuans and Europeans were by law kept apart on occasions of public entertainment ; Papuans were forbidden to walk freely within the town limits of Port Moresby between the hours of 9 pm and 6 am. Dress for Papuans was codified. We have the amazing law (enforced) which forbade "natives", male and female alike, to wear clothing above the waist. Inglis gives ample evidence of racial prejudice on the part of even the more tolerant of colonial administrators, their observations, for instance, on the "child-like" and "animal" characteristics of the Papuans. She notes that in so far as such prejudice was reflected in law, racism in colonial Papua was far more extreme than that of other Australian colonies.

Inglis does not give us a coherent theory of racism which might account for such colonial hysteria. Nor does she account in full for the white population's fear of the black man's "savage" inclinations. Here is, in the main, a descriptive work. Nevertheless, she does show insight in the form of analysis scattered in pieces throughout the monograph. Port Moresby was a tiny community which mainly comprised a solidly middle-class and white populace. It is Inglis's opinion that, as such, it was a threatened and insular community, threatened because of its smallness and also from the considerable economic set-backs it suffered throughout the 1920s and 1930s. Racial fear mounted as Port Moresby experienced an increase in the numbers of acculturated Papuans and an influx of white women into it. In the end, however, it is Inglis's judgment that the clamour for stricter laws, especially the demand for the greater protection of European women, was in fact a political ploy on the part of many citizens of Port Moresby who were antagonistic to the particular lieutenant-governor in power. To prevent conflict with the Papuans, the lieutenant-governor until 1926 had made an effort to maintain leniency in the criminal code affecting them. It was this leniency that was under attack.

We might well question Inglis's view that the extreme law could be explained in the main by political manoeuverings on the part of competitors of the lieutenant-governor. After he actively supported the passing of The White Women's Protection Ordinance he suffered little opposition. The fear felt was real enough.

One of the main topics of this monograph is the myth associated with, and indeed the rationalization for, the enactment of The White Women's Protection Ordinance, namely, that young white women not knowing how properly to treat servants provoked attacks (which never occurred, the reader should be reminded). It in itself is highly interesting for those dealing with man's creativeness in devising fantasies to account for his own irrational behaviour, especially in connexion with those he perceives as being in some sense without human attributes, e.g. other races or women. We have the following paradox in colonial ideology : while it was white woman as virgin that needed to be protected by her white man, it was white woman as whore responsible for this need. It was not only the "native" who was perceived as being "child-like".

Cargo cults, the name given to the cults of colonial New Guinea where New Guineans attempted through seemingly bizarre ritual to acquire the goods of the white man, have been interpreted as elaborate attempts to acquire a human and equal relation with the white intruders, rituals which inevitably failed due to the New Guinean's absolute lack of knowledge about the white man's ways. The sequence of events described within Inglis's monograph gives us the other side of the coin. The white colonists, in their extreme attempts to maintain (and reinforce their beliefs in) the unequal and non-human status of the "natives" and thereby to protect the purity of themselves, demonstrate in full their lack of knowledge of the Papuans. As the facts presented within this monograph make clear, it was not only the legislation of colonial Papua that was built upon a sound foundation of fantasy, but the colonial relations as well, which the law after all merely reflected.

Joanna Overing Kaplan

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A feminine touch

Perceiving Women
edited by Shirley Ardener
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The title, *Perceiving Women*, is a deliberate play on two meanings which together form the major theoretical framework of the book. Both meanings can be phrased as related research questions. In the first place what kind of perceptions do women in any particular culture have of themselves—what is the experience of femininity like ? But, secondly, how can such data be accurately derived from the practice of sociological or anthropological observation, given that observers are human beings (male or female) with their own value-stances and capacities for selective perception ?

There have always been a few staunch women anthropologists in the field to draw our attention to the "problem" of women—Margaret Mead, Phyllis Kaberry, Audrey Richards—to name some of them. But on the whole anthropology, like sociology, has neglected the female component in society or has given it particular kinds of attention only, looking at women in locations and guises that most nearly shadow western industrial stereotypes of womanhood. Protestations of male bias have a tired ring about them now, but substantive attempts to remedy the situation are valuable.

Perceiving Women is a collection of essays documenting women's self-perception in various cultures and considering some of the problems involved in studying them. It includes contributions by Judith Okely on gypsy women, by Hilary Callan on diplomats' wives, by Dril Williams on a community of Carmelite nuns and by Caroline Ifeka on the Nigerian Women's War of 1929. Edwin Ardener, who wrote a paper called "Belief and the Problem of Women" in 1968 (here reprinted), adds his later reflections on this first statement of the problem. Shirley Ardener has contributed an essay on the relationship between female militancy and the use of sexual insults.

The general consensus of opinion among the authors seems to be that the "problem" of women for the anthropologist is that they are relatively inarticulate and constitute a "muted" group in society. The Ardeners state the case for this hypothesis most strongly ; Edwin Ardener in particular suggests that female models of society, because of their lack of articulation, are best abstracted via a study of symbolism. In a sense all generalizations about "women" (and "men") are liable to be misleading and thus dangerous, but this one seems to me especially so. To whom are women's models muted and inarticulate ? Not to the women themselves surely ? In so far as specific models of society belong to particular groups, they are sustained by their credibility and communication within each group.

There may be recognition of discrepancies between one model and another — just as, for example, British women may acknowledge that the prevailing male model of nagging gossipy women diverges from their own ideas about the importance of the kinds of communication for which these disparaging terms stand. But such recognition is not equivalent to belief in a dominant/muted or articulate/inarticulate distinction.

I also wonder how far the economic and general power structure of male-female relationships contributes to the way in which male or female models are presented to the anthropologist. This is not a dimension which is much considered here (with the notable exception of Caroline Ifeka's piece). The phenomenon of women's models of men seems to receive much less attention than that of men's models of women, and I idly wondered whether the two shortcomings were connected. I had substantial problems with Shirley Ardener's squaloon of Bakweri (West African) women's use of sexual insults and the writings of feminist intellectuals in the West, since Millett, Greer, Firestone *et al* are not normally considered representative of women in modern industrialized society today.

Ann Oakley

Reviewers

R. H. Barnes is author of *Kedang : a Study in the Collective Thought of an Eastern Indonesian People* and editor and co-translator of Josef Kohler On the Prehistory of Marriage ;

P. T. W. Baxter is senior lecturer in social anthropology at the University of Manchester and author of *The Arsimbi and Related Peoples* ;

D. G. Boyce has written *Englishmen and Irish Troubles* and lectures in government at University College of Swansea ;

A. P. M. Coxon lectures in sociology at the University of Edinburgh ;

Thomas Crump is at the anthropological-sociological centre at the University of Amsterdam ;

Denis Donaghue is professor of modern English and American literature at University College Dublin ;

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Ann Oakley has written *Women and Change* and *The Sociology of Housework* ;

D. F. Pocock is reader in social anthropology at the University of Sussex ;

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BOOKS

Money functions

Primitive and Modern Money
by Jacques Melitz
Addison Wesley, £1.95
ISBN 0 201 11750 9

This unusual interdisciplinary study reflects the wide-ranging interests of an author who, after teaching economics in the United States, now holds a research position in the Ministry of Economics and Finance in Paris. The book is concerned with "the elementary questions regarding money : what it is, what it does, how it came about". Taking as its starting point the way in which "the question of the origin and development of money belongs to the fields of anthropology, classicism, and history, while concern with the concept and nature of money is mainly the domain of economics", it attempts a synthesis of the accumulated wisdom of these different disciplines.

But what should be the criteria for judging such a synthesis ? Ideally the author, by applying the insights of one discipline, should illuminate points which would otherwise be obscure in another. The interaction which Dr Melitz is mainly concerned with is that between economics and anthropology.

As an economist he succeeds to a fair degree in showing how often the technical resources of economic anthropology are inadequate to the point of restricting its interpretation of its own research material. In demonstrating that the theoretical basis of economics is strong where that of anthropology is weak, Dr Melitz might have noted how much more care the anthropologists give to the empirical basis of their research. On the other hand, he does well to point out how much anthropology, in its understanding of money, has suffered from its classic disdain of the diffusionist hypothesis. Here, however, it should be noted that this phase is past history, and that economic anthropology is now being conducted at a more sophisticated level.

Dr Melitz, in his discussion of Pospisil's study of the Kapauku Papuan economy, notes the beginning of this trend, but why, then, are there so few references to more recent studies in economic anthropology ? And why does Dr Melitz pay so much attention to Dalton and Polanyi, when he is so much out of sympathy with them ? It is not as if their works are regarded as definitive by economic anthropologists.

But however this book may be criticized, it is about the only one in this important and interesting field. Dr Melitz is not only a more than competent economist, but also an imaginative interpreter of economic material outside its traditional fields of application. His study should enlighten the anthropologist and inform the economist. Unfortunately, because of the way in which the academic world is organized, this book will *seem* to be marginal when looked at from any traditional standpoint, but this is no criticism of its author. If Dr Melitz fails to answer many of the questions which interest him, this is only because they are so fundamental. If this book does not actually show how "[money] came about", it shows at least how the historical—or better, perhaps, prehistorical—frontiers must be pushed back before the right context is established for further research. At the end of the day one is left hoping for a much more complete study from Dr Melitz. If his present book promises "more than it actually achieves, it leaves a certain assurance that in time the promise will be kept, and this *is* something to look forward to.

Thomas Crump

In an Indian context

Six Essays in Comparative Sociology
by André Béteille
Oxford University Press, £2.00
ISBN 0 19 560472 5

People who do not know Professor Bétellie might suppose from his name that he is not Indian when in fact he is. This is not gratuitous information because this book is primarily intended for his fellow academics in India and should not be mistaken for the work of some European telling them about themselves. Bétellie is a rising figure in the younger generation of Indian sociologists whose reputation rests on several substantial and useful publications. This present work marks a step in the domestication of sociology and social anthropology in India. For too long social scientists in India have asked questions and pursued lines of inquiry originally shaped by European and American scholars and their work has been imported. Bétellie implicitly reshapes the intellectual tradition by bringing to the forefront the works and preoccupations of a distinguished line of Indian scholars. British scholars may be piqued to find their contributions underplayed—they must be content, they have had a good run.

That this work is for his fellows in India is clear from the outset. The opening chapter "Sociology and Social Anthropology" urges that those who are more interested in the similarities of human societies than in their differences will be more inclined to accept the unity of the two disciplines. Bétellie and many of his colleagues like Professor M. N. Srinivas before him, realized in social anthropology, but without the term connotes a preoccupation with the exotic they have come to call themselves sociologists. The first step in the decolonization of thought. To insist on the unity of the disciplines in India is to carry this process a stage further.

The book is not well titled, the essays are not in comparative sociology but rather *on* or *about* it. As I understand Bétellie, comparison implies taking into account studies conducted elsewhere in the world and using them for a critique of concepts used by Indian sociologists, which is not comparative sociology as the term is generally understood. Nevertheless it is welcome because the Anglo American tradition which was inherited by the earlier generation in India did tend to parochialize the sub-continent by insisting too much on the uniqueness of its social forms. The particular essays which dicuss the use of the terms "tribe", "peasant" and "cracker" employ the technique of critique by comparison to considerable effect.

There seems to be also a hidden significance in the use of the word "comparative" in the title which relates to Bétellie's respect for Marxism and his doubts about Marxists. This is expressed in the concluding essay "Marxism and Sociology" where he writes: "Whereas Marx believed that the classless society would come into being in the future, Marxists in our time believe that such a society, or a close approximation to it already exists. Now, sociology as an intellectual discipline must be either fully comparative or nothing . . . it must view every type of human society with the same critical detachment." This essay, based on a lecture given from time to time to his students in Delhi, is a polite attack on Indian Marxists for according to Soviet Russia and more recently China a privileged place outside the scope of sociological assessment. "The sociologist", writes Bétellie, "only demands that all societies—American, British, Chinese, Soviet as well as Indian—be viewed in the same cold, clear light." The term "comparison" used in this context is disturbing for it encourages us to read into the preceding essays a political intent that was not apparent on first reading.

D. F. Pocock

Multiplex

Kinship in Bali
by Hildred and Clifford Geertz
University of Chicago Press, £6.85
ISBN 0 226 28515 4

In this small book the Geertzs attempt to demonstrate the unexceptionable theses that Balinese society is not dominated by the institutions of kinship, that kinship does not form a definable object of study, that kinship is a variety of social idiom, that the Balinese idiom of kinship is not an autonomous system. They try to show that there are a bewildering variety of Balinese practices, and that the customs and organizations they choose to examine as pertaining to kinship are multiplex, which is to say that they might just as well be interpreted as belonging to religion, politics or social status.

The focus of their study is the *dadia*—which they describe as an agnatic, preferentially endogamous, highly corporate group of people, descended from a common ancestor. The *dadia*, however, appear under a variety of names in Bali ; membership is not confined to agnatic relatives ; commoner *dadia* do not retain genealogical records ; not every Balinese is a member of a *dadia* ; *dadia* are formed for a variety of purposes ; it is unpredictable when and why they will appear, and the reasons for forming them have little to do with kinship principles. Gentry and commoner kingroups are said to be variants of a single underlying type, but they differ in their names and structure. The Geertzs contrast the commoner *dadia* to one ideal model of some African lineage systems. The principle of complementary opposition on which this model is based is said to be absent in Bali because *dadia* stand on their own rather than in opposition to other *dadia*.

The use of teknonymy suppresses personal names and promotes genealogical amnesia. The gentry, however, retain their genealogical history ; and in their analogue of the *dadia*, the technique of moving junior branches away from the court and allowing them to sink in status plays a similar functional role to segmentary opposition in lineage systems.

As an account of some of the variety of Balinese social forms, the book presents original and interesting material collected during two very brief stays in 1957 and 1958. As a record of Balinese kinship, it is inadequate on a number of grounds. At one point the authors speak of the need for a minute comparison, moving from community to community. Instead of a book bearing the portentous title *Kinship in Bali*—an island, after all, of two million—we might rather expect a series of detailed monographs, demonstrating the impossibility of easy summation. There is already a massive literature on Bali and the reader could reasonably expect to be told how the present study stands in relation to that work. But their book has no bibliography, and their notes cite only two titles in Dutch. Furthermore, it is hard to see why a book on kinship should stop with the *dadia* or why a full study of Balinese kinship should not, like one on religion, entail close investigation of virtually every aspect of society."

On the jacket Ward Goodenough claims that this is an innovative study, likely to become a classic. His assessment doubtless rests not on their moderate contribution to the ethnographic record, but on their theoretical ambitions, namely their attempt to bring the notion of kinship system into "some disrepute". The case is made principally in a final chapter, the major flaw of which is not so much their travesty of French sociology and British social anthropology, as the fact that it leaves the reader to find out for himself that the case against taking kinship as a definable problem—and therefore as the topic of a book—has been decisively made elsewhere. It was, after all, Rodney Needham, in *Rethinking Kinship and Marriage* (1971), who originally and finally demonstrated that the term kinship "does not denote a discriminable class of phenomena or a distinct type of theory".

R. H. Barnes

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Applicants should be prepared to commence duties in the first half of 1976, be qualified to teach undergraduate and postgraduate courses in soils mechanics, and be capable of research. The Department has a teaching staff of 15 and offers good opportunities for theoretical and experimental research. Detailed information about duties, tuition and current research in staff fields from Professor G. A. Chaney, (6th December, 1975.)

Salary scale: Lecturer $A12,063 by $A960(1) to $A16,143.

Applications, in duplicate, giving particulars of age and marital status, academic and academic record and experience, and the names and addresses of two referees, should be sent to the Registrar of the University of Adelaide, South Australia 5001.

Further information available from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London, WC1H 0PF.

AUSTRALIA
LA TROBE UNIVERSITY
Melbourne
LECTURER IN LINGUISTICS

The appointment will be for a fixed term of one, two or three years according to the wishes and qualifications of the appointee.

At present, the University has no department of Linguistics, but many courses in the principal aspects of linguistic study (introductory courses, phonetic analysis and language theory) are offered at second- and third-year level, mainly to students taking languages or philosophy as their major study in the School of Humanities. The appointee will be expected to teach these courses from March, 1976, and with the assistance, for administrative purposes, of the Department of Philosophy. Plans for the further development of linguistics in the next triennium are at present under consideration.

Salary, $A12,063 by $960 (7 to $16,143.

Further information and application forms are available from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF, or from the Registrar, La Trobe University, Bundoora, Victoria, Australia, 3083.

Applications close on 22 December, 1975.

AUSTRALIA
MURDOCH UNIVERSITY
WESTERN AUSTRALIA
CHIEF CATALOGUER (£N.0021)

Applications are sought for the position of CHIEF CATALOGUER in the Library of Murdoch University, located 136m south of Perth. The University is planned for a new city-centered campus, and will open in 1976 with 500 undergraduates, almost no backlog, no integrated books, and a staff of 48 of whom 16 are in the cataloguing section. There is an annual increment of about 6,000 volumes. Remuneration is by Dewey, cataloguing is by AACR 2, and the cataloguing conforms to Australian subject headings. Experience in cataloguing collections of books in Chinese and Malay, and ability to read them, is desirable.

The appointee should have a university degree or recognised equivalent qualifications in librarianship together with appropriate experience. Particular attention will be given to ability to organise the day-to-day routine of work, especially in the early stages of the life of the University, and ability to participate in the plans for computerisation.

Salary range: $A10,812-$A12,192 per annum.

Conditions of appointment include removal allowance, airfare for the appointee and dependants, and study leave.

Applications including full personal particulars, a resume of experience, qualifications and work history together with the names and addresses of three referees should reach the Personnel Officer, Murdoch University, South Street, Murdoch, Western Australia 6150, by 15 October, 1976.

AUSTRALIA
UNIVERSITY OF NEW ENGLAND
Armidale, New South Wales

VISITING LECTURESHIP IN SOCIOLOGY 1976

Either 10 months from February 1976, or six months from June, 1976.

Salary, $A10,200 or $6,000. Some travel assistance given.

Duties include lecturing, seminar work and supervision of tutorial studies and study of individual students, and supervision of postgraduate work for Ph.D. and Diploma degrees. Interest in research in one or more of the following areas: medical sociology, deviance, family and marriage, urban problems, or social and ethnic problems in developing societies.

Further particulars from Staff Officer, University of New England, Armidale, New South Wales, 2351, Australia, to whom applications, together with the names and addresses of two referees, should be sent by December 19, 1975. Applicants should be informed whether they are being interviewed overseas or in Australia.

AMERICA
UNIVERSITY OF CALIFORNIA
Irvine

The School of Social Sciences, an interdisciplinary unit of the Irvine Campus of the University of California, has a position for an ASSISTANT PROFESSOR in the ANTHROPOLOGY area, seeking a dentist with a strong research training in political economy and anthropology. The school is also seeking a dentist with a nurse an active programme of research and graduate training and who will teach undergraduate courses.

Applications from all qualified candidates are welcome, although women are especially encouraged to apply. Send curriculum vitae and the names of three referees to Professor Gary Marx, School of Social Sciences, University of California, Irvine, California 92717, before February 1, 1976.

AUSTRALIA
UNIVERSITY OF NEW ENGLAND
Armidale, New South Wales

VISITING LECTURESHIP IN SOCIOLOGY 1976

Either 10 months from February 1976, or six months from June, 1976.

Salary, $A10,200 or $6,000. Some travel assistance given.

Duties include lecturing, seminar work and supervision of tutorial studies and study of individual students, and supervision of postgraduate work for Ph.D. and Diploma degrees. Interest in research in one or more of the following areas: medical sociology, deviance, family and marriage, urban problems, or social and ethnic problems in developing societies.

Further particulars from Staff Officer, University of New England, Armidale, New South Wales, 2351, Australia, to whom applications, together with the names and addresses of two referees, should be sent by December 19, 1975. Applicants should be informed whether they are being interviewed overseas or in Australia.

BATH
THE UNIVERSITY
SCHOOL OF HUMANITIES AND SOCIAL SCIENCE
LECTURER IN ECONOMICS

Applications are invited for the post first mentioned above in A124 in the Register of Academic Posts, tenable from January 1976 or thereafter, for a period of three years in the first instance. Duties will include the preparation of materials for a course in economics.

Salary in the lower part of the range £2,778-£4,081 per annum under review.

Application forms and further particulars may be obtained from the Registrar, The University, Bath BA2 7AY, quoting reference A124. Closing date for receipt of applications 5 December, 1975.

CANADA
SIMON FRASER UNIVERSITY

Expects to appoint an ASSISTANT PROFESSOR of HISTORY in September 1976.

Applicants should be qualified in Canadian history. Preference will be given to candidates in the history of British Columbia or regional studies, but applicants with other specialization will also be given serious consideration.

Salary will depend on the candidate's qualifications.

Applications including C.V. and three references, should be sent to Professor Peter Ruby, Chairwoman, History Department, Simon Fraser University, Burnaby, British Columbia.

CAMBRIDGE
THE UNIVERSITY
ASSISTANT REGISTRARY BOARD OF GRADUATE STUDIES

Applications are invited for the office of Assistant Registrary to assist the Secretary of the Board of Graduate Studies in the work of the Board. Pensionable salary under review £2,862-£6,645.

Duties throughout, with mem. bership of Tutorial Staff.

Further particulars are obtainable from the Registrary, The University Registry, The Old Schools, Cambridge CB2 1TN, to whom applications, together with the names of two referees, should be sent with curriculum vitae not later than three weeks from the publication of this advertisement.

UNIVERSITY COLLEGE CARDIFF
LECTURER IN PSYCHOLOGY (with special reference to medical studies)

Applications are invited for the above post in the Department of Psychology. Candidates should have a degree in Psychology or equivalent and a medical qualification. Experience in a medical context, and/or qualifications in statistics and computing would be an advantage. Responsibility for teaching psychology to medical students and undertaking research in medical psychology. Salary within the range £2,778 to £6,050 per annum according to qualifications and experience.

Further particulars and application forms from the Registrar, University College Cardiff, P.O. Box 78, Cardiff CF1 1XL, to whom they should be returned as soon as possible.

EDINBURGH
THE UNIVERSITY
DEPARTMENT OF ENGLISH LITERATURE
LECTURER

Applications are invited for the post of Lecturer in English Literature. The successful candidate should take up his duties in October 1976 or as soon as possible thereafter. Preference will be given to candidates whose field of interest lies in English literature before 1800.

Salary will be within the range £2,862 to £6,195 with superannuation.

Applications, by letter (eight copies) together with the names of two referees, should be sent not later than 15th January 1976, to the Secretary of the University of Edinburgh, The College, South Bridge, Edinburgh EH8 9YL, from whom further particulars may be obtained. Please quote reference 7863.

LANCASTER
THE UNIVERSITY
LECTURER IN THE SCHOOL OF INDEPENDENT STUDIES

Applications are invited from candidates working in any area of the humanities or social sciences. Applicants should have research and teaching experience and interests in the field of part-time and in consultation with the University of predominantly continuing education problems.

It is anticipated that the successful candidate will also have an opportunity to continue working in his/her field of study. Applications, with the name of an appropriate university department.

Salary on the lecturer scale £2,778-£6,050 (under review) but an appointment is likely to be made at the lower end of the scale.

Further particulars may be obtained (quoting reference 7/G) from the Establishment Officer, The University, Lancaster, University House, Lancaster LA1 4YW, to whom applications (five copies) naming three referees should be sent not later than December 10, 1975.

CAMBRIDGE
THE UNIVERSITY
ASSISTANT REGISTRARY BOARD OF GRADUATE STUDIES

Applications are invited for the office of Assistant Registrary to assist the Secretary of the Board of Graduate Studies in the work of the Board. Pensionable salary under review £2,862-£6,645.

Duties throughout, with membership of Tutorial Staff.

Further particulars are obtainable from the Registrary, The University Registry, The Old Schools, Cambridge CB2 1TN, to whom applications, together with the names of two referees, should be sent with curriculum vitae not later than three weeks from the publication of this advertisement.

LEEDS
THE UNIVERSITY
DEPARTMENT OF TRADE AND INDUSTRY RESEARCH STUDENTSHIP
ELECTRONICS AND CONTROL ENGINEERING

Applications are invited from graduates in Electrical Engineering, Control or Physics, preferably with some engineering experience, to enter an M.Phil. course (or research) programme sponsored by the National Physical Laboratory. The project involves research into energy conservation in power transducers and the development of a secondary standard 17/s.r. automated power measurement system.

The value of the studentship will be within the range £1,650 to £2,000 per annum, depending on experience and marital status.

Further particulars and application forms from Mr. J. Hilley, Department of Electrical and Electronic Engineering, The University, Leeds LS2 9JT.

LONDON
THE UNIVERSITY
CHELSEA COLLEGE
COMPUTERS IN PHYSIOLOGY TEACHING

A physiologist is required, possibly to undertake some teaching in the use of computers in undergraduate physiology courses at Chelsea College, London.

The successful candidate will be expected to have experience in education and/or computing, and will be based at Chelsea College. An appointment will be made in the first instance on one year, at a salary not exceeding £6,000 per annum, depending on experience.

Application should be made in writing to Dr. Peter S. Lai, Department of Physiology, Chelsea College, Manresa Road, London SW3 6LX.

MANCHESTER
THE UNIVERSITY
CHAIR OF GENETICS AND CELL BIOLOGY

Applications are invited for a newly-established Chair in the field of Genetics and Cell Biology in the Faculty of Science.

Applicants, who should be suitable for photographs, should have had extensive teaching experience, research, publications. Please send the names and addresses of three persons to whom referees may be made (must reach the Registrar, Claremont Tower, The University, Oxford Road, Manchester M13 9PL, by December 15th, 1975. Further particulars may be obtained from the Registrar, quoting reference 1/G.

SOUTH AFRICA
UNIVERSITY OF NATAL
DEPARTMENT OF CHEMISTRY
Pietermaritzburg

Applications are invited from suitably qualified persons for appointment to the post of LECTURER in CHEMISTRY.

The duties are teaching and research in organic chemistry. The research will probably be in the field of insulin chemistry. The post is likely to suit a person with a B.Sc.(Hons.) or higher degree.

The salary scale attached to the post is R3,240 by R180 to R3,600 by R240 to R4,560 by R300 to R6,060 per annum.

The commencing salary notch will be dependent on the qualifications and/or experience of the successful applicant. In addition, an annual vacation gratuity bonus is payable, subject to treasury regulations.

Application forms, further particulars of the post and information on pension, medical aid, funeral, nursery, housing loan and subsidy schemes, long leave conditions and travelling expenses on first appointment may be obtained from the Registrar, University of Natal, Private Bag, Pietermaritzburg, Natal, South Africa, with whom applications, duly completed, must be lodged not later than January 31st, 1976.

SOUTH AFRICA
UNIVERSITY OF NATAL
DEPARTMENT OF GEOLOGY
Pietermaritzburg

Applications are invited from suitably qualified persons for appointment to the post of LECTURER.

The salary scale attached to the post is R3,300 by R300 to R4,500 per annum.

The commencing salary notch will be dependent on the qualifications and/or experience of the successful applicant. In addition, an annual vacation gratuity bonus is payable, subject to treasury regulations.

Application forms, further particulars of the post and information on pension, medical aid, funeral, nursery, housing loan and subsidy schemes, long leave conditions and travelling expenses on first appointment are obtainable from the Registrar, University of Natal, King George V Avenue, Durban, South Africa, with whom applications, duly completed, must be lodged not later than January 31st, 1976.

BELFAST
THE QUEEN'S UNIVERSITY
CHAIR OF TOWN AND COUNTRY PLANNING

Applications are invited for the Chair of Town and Country Planning from 1st April, 1976. The vacancy is occasioned by the resignation of Professor J. C. Leighton to accept a post in the University of Nottingham as Professor of Planning and Director of the Institute of Planning Studies. The salary is £8,250 with contributory pension rights under the F.S.S.U. (1/8/5).

Applications should be received by 16th January, 1976. Assistance is available with removal expenses.

Further particulars may be obtained from the Registrar, The Queen's University of Belfast BT7 1NN Northern Ireland. (Please quote Ref. No. 75.1788.)

LONDON
THE UNIVERSITY
CHELSEA COLLEGE
COMPUTERS IN PHYSIOLOGY TEACHING

A physiologist is required, possibly to undertake some teaching in the use of computers in undergraduate physiology courses at Chelsea College, London.

The successful candidate will be expected to have experience in education and/or computing, and will be based at Chelsea College. An appointment will be made in the first instance on one year, at a salary not exceeding £6,000 per annum, depending on experience.

Application should be made in writing to Dr. Peter S. Lai, Department of Physiology, Chelsea College, Manresa Road, London SW3 6LX.

MANCHESTER
THE UNIVERSITY
CHAIR OF PSYCHOLOGY

Applications are invited for a Chair of Psychology in the Department of Psychology in the Faculty of Science.

Further details of the Department, and conditions of service offered, together with particulars of the appointment, may be obtained from the Registrar, Manchester M13 9PL, to whom applications, two copies, are suitable for photocopying, should be sent not later than January 31st, 1976, quoting reference ADV. 105/75.

BELFAST
THE QUEEN'S UNIVERSITY
CHAIR OF TOWN AND COUNTRY PLANNING

Applications are invited for the Chair of Town and Country Planning from 1st April, 1976. The vacancy is occasioned by the resignation of Professor J. C. Leighton to accept a post in the University of Nottingham as Professor of Planning and Director of the Institute of Planning Studies. The salary is £8,250 with contributory pension rights under the F.S.S.U. (1/8/5).

Applications should be received by 16th January, 1976. Assistance is available with removal expenses.

Further particulars may be obtained from the Registrar, The Queen's University of Belfast BT7 1NN Northern Ireland. (Please quote Ref. No. 75.1788.)

LONDON
THE UNIVERSITY
LECTURESHIP IN ECONOMICS

Applications are invited for a lectureship in the Department of Economics, tenable from January 1976 or as soon as possible thereafter, for a period of three years in the first instance. Duties will include the preparation of materials for a course in economics.

Salary in the lower part of the range £2,778-£4,081 per annum under review.

Application forms and further particulars may be obtained from the Registrar, The University, Bath BA2 7AY, quoting reference A124. Closing date for receipt of applications 5 December, 1975.

SOUTH AFRICA
UNIVERSITY OF THE WITWATERSRAND Johannesburg
CHAIR OF FRENCH

Applications are invited for appointment as a full professor of French in the Department of Romance Studies. Applicants should state their qualifications in French language and literature, as well as teaching experience and research interests. In addition, qualifications and experience in any of the fields of Linguistics or Drama in general should be indicated.

The salary range attached to this post is R6,060 by R240 per annum to R7,140 by R300 per annum. The initial salary will depend on the qualifications and experience of the successful candidate.

Duties are to be assumed as soon as possible on a date to be negotiated.

Intending applicants should obtain the information sheet relating to this post. The policy of the University is not to discriminate in the appointment of staff or the selection of students on the ground of sex, religious creed or political or national origin.

Further particulars relating to this policy and the extent to which it can be put into practice, are included in the information sheet, which should be obtained from the London Representative, Mr. Peter de Wilde, 1 Hyde Park Gardens, W2 2LT, to whom applications should be lodged with the Witwatersrand Job Bureau Avenue, Johannesburg, South Africa, not later than 31st January, 1976.

WARWICK
THE UNIVERSITY
LECTURESHIP IN ECONOMICS

Applications are invited for a Lectureship in the Department of Economics. The Department would like to make an appointment in either Monetary Economics or International Economics or Econometric Theory but applications will be welcome from any other fields. The appointment is to be tenable from a date to be arranged, the start date being 1st October 1976.

Salary on the scale £2,778 to £6,050 per annum (under review) initial appointment not higher than the fourth point £5,250 per annum).

Further particulars and application forms may be obtained from the Academic Registrar, University of Warwick, Coventry CV4 7AL, quoting Ref. No. 15/7775. Closing date for receipt of applications is 15th December 1975.

SOUTH AFRICA
UNIVERSITY OF THE WITWATERSRAND Johannesburg
CHAIR OF FRENCH

Applications are invited for appointment as a full professor of French in the Department of Romance Studies. Applicants should state their qualifications in French language and literature, as well as teaching experience and research interests. In addition, qualifications and experience in any of the fields of Linguistics or Drama in general should be indicated.

The salary range attached to this post is R6,060 by R240 per annum to R7,140 by R300 per annum. The initial salary will depend on the qualifications and experience of the successful candidate.

Duties are to be assumed as soon as possible on a date to be negotiated.

Intending applicants should obtain the information sheet relating to this post. The policy of the University is not to discriminate in the appointment of staff or the selection of students on the ground of sex, religious creed or political or national origin.

Further particulars relating to this policy and the extent to which it can be put into practice, are included in the information sheet, which should be obtained from the London Representative, Mr. Peter de Wilde, 1 Hyde Park Gardens, W2 2LT, to whom applications should be lodged with the Witwatersrand Job Bureau Avenue, Johannesburg, South Africa, not later than 31st January, 1976.

THE OPEN UNIVERSITY
RESEARCH ASSISTANT IN EARTH SCIENCES

Applications are invited for a Research Assistantship in Earth Sciences, tenable from January 1976, or as soon as possible thereafter, at a salary scale (under review) of £2,778 by £150 to £3,081 per annum (inclusive of London Allowance). The successful applicant will work on the history, petrology and geochemistry of the Lewisian complex of the Scottish Highlands, and contribute to a new course (to be presented in 1978) on the Precambrian. The appointee will be responsible for the handling and manipulation of geochemical analytical data. The candidate should possess a degree in Earth Sciences; a higher degree is desirable but not essential. Commencing salary will be within the scale £2,778 to £3,081 per annum, subject to review from October 1, 1976.

Further particulars and application forms may be obtained from the Personnel Manager (RA/1), The Open University, P.O. Box 76, Walton Hall, Milton Keynes, MK7 6AA. Telephone: Milton Keynes 75566.

Closing date: December 15, 1975.

SOUTHAMPTON
THE UNIVERSITY
DEPARTMENT OF ELECTRONICS

Applications are invited for a Lectureship in Electronics, tenable in September 1976 or thereafter, in the field of Digital Electronics, with particular emphasis on the problems of interfacing digital devices with analogue devices. Candidates should be graduates in Electronics with a good honours degree and should have some knowledge of digital techniques. Experience in digital design would be an advantage.

The appointment will be for two years with an initial salary in the range £2,778 to £3,081 per annum (under review) with superannuation under F.S.S.U. Applications (three copies), including the names of two referees, should be sent by 8th January, 1976, to the Secretary, The University, Southampton SO9 5NH, not later than 31 January, 1976. Please quote reference 219/B (LS).

SOUTHAMPTON
THE UNIVERSITY
DEPARTMENT OF CHEMISTRY
LECTURESHIP IN INORGANIC CHEMISTRY

Applications are invited for the above-named post, tenable from 1 October 1976, or as soon as possible thereafter, at a salary scale (under review) of £2,778 to £6,050 per annum.

Further particulars from Mr. D. S. Copland, The University, Southampton SO9 5NH, to whom applications should be lodged with the Secretary of the Polytechnic should be sent as soon as possible and not later than 14 January, 1976. Please quote reference 43/C & PHILS.

SALFORD
THE UNIVERSITY
DIRECTORSHIP OF THE COMPUTING LABORATORY

Applications are invited for the position of Director of the Computing Laboratory.

The primary responsibility of the Director will be to further the development of the laboratory, which has responsibility for the provision of computing facilities to the University.

The main university computer is an ICL 1904S, and extensive use is made of terminals, linked to it and to other computers in the region. Applicants should have a degree in mathematics, science or engineering, or equivalent qualifications, and should have had at least 5 years experience in computer applications, including experience in the handling and manipulation of large files of data. Further particulars may be made until 31st December, 1975, and should be addressed to the Registrar, The University, Salford M5 4WT, to whom applications should be submitted by 15th January, 1976. Please quote reference CL 2/75.

SOUTHAMPTON
THE UNIVERSITY
DEPARTMENT OF ELECTRONICS

Applications are invited for a Lectureship in Electronics, tenable in September 1976 or thereafter, in the field of Digital Electronics, with particular emphasis on the problems of interfacing digital devices with analogue devices. Candidates should be graduates in Electronics with a good honours degree and should have some knowledge of digital techniques. Experience in digital design would be an advantage.

The appointment will be for two years with an initial salary in the range £2,778 to £3,081 per annum (under review) with superannuation under F.S.S.U. Applications (three copies), including the names of two referees, should be sent by 8th January, 1976, to the Secretary, The University, Southampton SO9 5NH, not later than 31 January, 1976. Please quote reference 219/B (LS).

USA

TWO APPOINTMENTS at the rank of full or ASSOCIATE PROFESSOR in the fields of ANALYTIC PHILOSOPHY and CONTINENTAL PHILOSOPHY. Both particularly welcome applications from qualified women and from members of minority groups. Interested persons write Professor Herbert Hiller, Chairman, Department of Philosophy, State University of New York, Albany, New York 12222, U.S.A.

THE UNIVERSITY COLLEGE OF WALES
Aberystwyth
LECTURER IN MUSIC

Applications are invited for the above post to commence in September or October 1976. Salary: £2,778-£5,565 per annum (under review). Applications (6 copies), together with the names of two referees, should be sent to the Registrar, The University College of Wales, Aberystwyth SY23 2AX, to whom completed applications should be returned by 8th January.

Polytechnics

Opportunities at Middlesex Polytechnic

These senior posts offer challenging opportunities to work in one of the country's largest polytechnics, which is based at a number of north London locations. This complex educational institution has a well-established reputation for innovation and expertise, a reputation in no small part due to the outstanding abilities and enthusiasm of staff at all levels. If you envisage your future career within an exciting and ambitious organisation and feel that your skills can make a valuable contribution to our development, write in confidence for further details of the following:

- **Systems Analyst** — £4,500-£5,253 pa
  An important new post which will involve working in association with academic and administrative staff on the design, implementation and maintenance of information and decision making systems. You must have substantial experience in the data processing field, the ability to collaborate at a variety of levels with staff in the rapidly evolving field of educational administration, and be of graduate status. The post is based initially at our new building at Bounds Green, although travel among polytechnic sites will be a regular working necessity.
- **Course Officer** — £4,086-£4,356 pa
  An exciting opportunity to work in the office of the Academic Registrar assisting with the co-ordination of the course development activities of the polytechnic, including the rapidly developing activity of internal validation processes. You should be a graduate with proven administrative ability and experience, preferably in a higher educational environment. Based initially at Hendon, and later in the new Bounds Green building.
- **Accommodation Officer** — £4,500-£5,253 pa
  This highly responsible post would require you to play a leading role in the development of schemes to acquire various types of additional student accommodation. At least three to five years experience with a housing association, a local authority housing department or other relevant area, perhaps in higher education, is an essential prerequisite of the post. Based at our Edmonton or Enfield sites.
- **Administrative Assistant —Admissions, ESM** — £3,183-£3,543 pa
  A varied job within the Engineering Science and Mathematics Resource Centre at our Enfield site. You would be involved extensively with computer applications and administrative procedures for agencies in this area. You should be of graduate status and have some experience in admissions experience, preferably in higher education.
- **Administrative Assistant —Awards** — £3,183-£3,543 pa
  A responsible job assisting with the liaison between the polytechnic, local authorities and other bodies on student grants. You would advise individual students on grants matters. An intelligent and sympathetic approach is essential, as is appropriate administration experience, preferably in higher education. You should have graduate status. Based at our Church Street, Edmonton site.
- **Administrative Assistant —Central Admissions** — £3,183-£3,543 pa
  This is an important position within the busy Admissions Office at our Church Street, Edmonton site. You would be involved with the co-ordination and development of the student admissions work of the polytechnic, and would supervise the work of the central admissions office. Graduate status and proven administrative ability and experience are essential. Experience in higher education and administration would be an advantage.

Write for further details and an application form, stating clearly which post you are applying for, and post first class to: The Appointments Officer, Middlesex Polytechnic (Ref. A105A), Queensway, Enfield, Middlesex EN3 4SF, to whom completed forms must be returned by December 1.

Middlesex Polytechnic

Polytechnics continued

LEICESTER
THE POLYTECHNIC
HEAD OF DESIGN CENTRE for the Profession, Leather and the Man Industries

Applicants should have experience in the practice of management of design in the manufactures catered for by the centre, together with relevant academic/professional qualifications and drive and enthusiasm necessary in establishing a new venture.

Salary £6,642 per annum.

Application forms and further details from Staffing Officer, Leicester Polytechnic, P.O. Box 143, Leicester LE1 9BH.

LONDON
POLYTECHNIC OF THE SOUTH BANK
FACULTY OF ENVIRONMENT SCIENCE AND TECHNOLOGY RESEARCH ASSISTANT in ACOUSTICS

A good honours graduate in Mathematics, Natural Sciences or Engineering is required to work on the design of absorptive acoustic materials in room ducts, with particular emphasis on properties of fibrous and perforating materials.

Salary scale, £2,267 to £3,765 per annum (including London Allowance).

Contract initially for two years.

Further particulars and application form from Dr. A. Cummings, Faculty of Environment Science and Technology, Polytechnic of the South Bank, Borough Road, London SE1 0AA. Tel: 01-928 8989.

MIDDLESEX
MIDDLESEX POLYTECHNIC
TEMPORARY RESEARCH ASSISTANT IN GEOGRAPHY AND PLANNING

Required at our Enfield site for nine months from January 1, 1976, to work on an SSRC sponsored project on rationalising the servicing of attractive rural landscapes. A working knowledge of computer programming is required and a knowledge of statistical methods would be an advantage.

Salary scale: £3,183 to £3,543 per annum.

Further details and application form: write first class to: Appointments Section, Middlesex Polytechnic, Hertford Road, Enfield, Middlesex EN3 4SF. Closing date November 24.

PORTSMOUTH
THE POLYTECHNIC
DEPARTMENT OF ECONOMICS AND ECONOMIC HISTORY

Applications are invited for the following posts in the Department of Economics and Economic History:

Lecturer Grade II/Senior Lecturer, £4,170 to £6,645 per annum.

Lecturer Grade I, £3,450 to £4,437 per annum.

Appointments will be made on the Lecturer Grade II part of the scale.

Further particulars and application form may be obtained from The Staff Officer, Portsmouth Polytechnic, Alexandra House, Museum Road, Portsmouth PO1 2QQ to whom completed applications should be returned by 8th December 1975. Please quote reference 250.

Polytechnics continued

PRESTON POLYTECHNIC

Applications are invited for the following appointments
*PRINCIPAL LECTURER in SYSTEMS AND INSTRUMENTATION
*SENIOR LECTURER in LAW
SENIOR LECTURER in ACCOUNTING
SENIOR LECTURER in MANAGEMENT STUDIES
(Applicants should be able to offer a specialist management subject)
SENIOR LECTURER in PUBLIC SERVICES MANAGEMENT
(Candidates will be expected to have suitable experience, preferably in Local Government)
LECTURER II in LAW
LECTURER II in ACCOUNTING
LECTURER II in ECONOMICS
(Preference given to candidates offering Quantitative Methods and/or the Economic Aspects of Decision Making)
LECTURER II in BUSINESS ORGANIZATION AND PLANNING
LECTURER II in PSYCHOLOGY
(Preference for candidates able to teach in one or more of the following areas)
(i) Social Psychology
(ii) Developmental Psychology
(iii) Abnormal Psychology
LECTURER II in PHYSICAL OR INORGANIC CHEMISTRY
LECTURER II in BIOLOGY
LECTURER II in STATISTICS AND COMPUTING
*Re-advertisements. Previous applications for these appointments will be reconsidered.
Salary Scales:
Principal Lecturer: £5,940-£6,642-£7,578.
Senior Lecturer: £5,031-£5,955-£6,417.
Lecturer II: £3,270-£5,493.
Application forms and further details are obtainable from the Chief Administrative Officer (Staffing), Preston Polytechnic, Corporation Street, Preston PR1 2TQ.
Closing date: 8th December, 1975.
(Except for LII in Psychology which is 31st December, 1975)

Faculty of Environmental Studies

Department of Architecture

Design Tutor for expanding undergraduate courses in Architecture. Applicants should have good practice and teaching experience and will be expected to participate in course management. The post will be filled at Lecturer II or Senior Lecturer level depending on experience and qualifications. (Ref. S/AO 263 A.)

Part-Time Architect/Tutors. Opportunities for one or two days tutorial teaching may be available in the near future. Anyone interested should write giving particulars of experience and interests to N. Frith (Ref. S/AO 263 B), Head of Department of Architecture, North East London Polytechnic, Forest Road, London E17 4JB

Faculty of Business

Department of Applied Economic Studies

Economist to teach to Final Honours Economics degree level and to contribute to research development. Specialists are sought in Urban Economics; or Theoretical Economics with an interest in modern political economy. The post(s) will be filled at Lecturer II or Senior Lecturer level depending on experience and qualifications (Ref S/AO 263 C.)

Salary Scales: (for full-time posts) Senior Lecturer £5,031-£6,417.
Lecturer II £3,279-£5,493. (Plus appropriate London Allowance.)

Application form and further details for full-time posts from: Academic Staffing Office (2), North East London Polytechnic, Forest Road, London E17 4JB. Tel.: 01-527 2272 ext. 187. Closing date: 8 December, 1975.

NELP North East London Polytechnic

Colleges of Further Education continued

Gwent college of higher education / coleg addysg uwch Gwent

FACULTY OF EDUCATION

LECTURER GRADE II in History in the School of Humanities

Applications are invited for the above post from History Graduates with a good Honours and/or a Research Degree. Experience of school work and/or teacher education is desirable.
The successful applicant will be required to lecture and participate in the development of existing and new degree schemes, the bias of which is in the field of modern, social and economic history.
The appointment will date from May 1st, 1976.
Salary £3,279-£5,493.
Applications to be submitted by 9th December, 1975. Application forms from The Dean of Administration, College of Higher Education, Allt-yr-yn Avenue, Newport, Gwent NPT 5XA.

Librarians

BODLEIAN LIBRARY

The following posts for Graduate Assistants are vacant in the Bodleian Library. Applicants should have a good honours degree as indicated below and professional qualifications or experience will be an advantage. The salary scale (to which it is expected that a cost of living increment will be added when National negotiations are completed) runs from £2,522 to £6,133 *per annum* with an efficiency bar at £5,103. Placing on the scale will depend on age and experience.

Department of Western Manuscripts
An Assistant with a good knowledge of modern British history of the relevant period *either* for the cataloguing of 20th Century political papers *or* of early modern archives and historical manuscripts.

Department of Oriental Books
An Assistant with a good honours degree in Chinese and preferably some working knowledge of Japanese.

Department of Printed Books
An Assistant with good honours degree in history or social studies. Duties will include supervision of collection of British and foreign official papers and publications of international bodies, and giving assistance to readers in the field of social studies.

Department of Catalogues
Senior Programmer for catalogue conversion project. Duties include maintenance of software for PDP-11/20 system, maintaining and running FORTRAN programs on ICL 1906A, and supervision and allocation of work of editing staff.

Further particulars can be obtained from the Secretary of the Library, Bodleian Library, Oxford OX1 3BG, to whom applications, giving a curriculum vitae and the names of two referees, should be made not later than December 13, 1975.

OXFORD PLAYHOUSE

OXFORD UNIVERSITY THEATRE

ADMINISTRATOR

required, who will be responsible for the management of the Playhouse and the arrangement of its programme. Users of the theatre include a resident professional company (Anvil Productions, Artistic Director: Gordon McDougall), undergraduate societies, visiting professional companies for drama, dance and opera.

Good professional experience in planning and financial control is essential and a University background is highly desirable.

Applications, with full curriculum vitae and the names and addresses of 2 referees, to the Secretary, Oxford Playhouse, Beaumont Street, OXFORD OX1 2LW, from whom further details can be obtained.

BIRMINGHAM

THE UNIVERSITY

ADMINISTRATIVE ASSISTANT

To fill a forthcoming vacancy in the Secretary's Office. The work is primarily concerned with the drafting of University legislation and advising University Officers upon the effect of national legislation upon the University. A legal background and experience or interest in the application of the law to the administration of a large organization is essential. Salary according to age, qualifications and experience in the IB (maximum £4,206) or in IA (maximum £5,[illegible]) scale, plus residual threshold payment and superannuation. Cost-of-living increase from 1st October, 1975, under review.

Application forms should be returned by 8th December to the Senior Assistant Secretary, University of Birmingham, P.O. Box 363, Birmingham B15 2TT, from whom further particulars may be obtained.

Fellowships and Studentships

OXFORD

ST. HUGH'S COLLEGE

Application is invited for the following postgraduate award.

JOANNA RANDALL-MACIVER JUNIOR RESEARCH FELLOWSHIP

St. Hugh's College proposes to elect to the above Fellowship, tenable from Michaelmas Term, 1976, open to women graduates only. The annual value will be £1,050 with residence. The subject of research shall be in the field of painting, sculpture, music or literature of any nation, in any period.
Further particulars from the Principal, St. Hugh's College, Oxford, to whom applications should be sent by Thursday, 8th January, 1976.

Courses

PLYMOUTH POLYTECHNIC

Opportunities to study

EDUCATIONAL TECHNOLOGY

are provided at Plymouth Polytechnic

(1) C.N.A.A. Diploma
Post-graduate/experience—1 year

(2) POLYTECHNIC DIPLOMA
Post-experience—1 term

(3) TWO WEEK SHORT COURSES
at regular intervals.

Apply to:
The Registrar,
PLYMOUTH POLYTECHNIC DRAKE CIRCUS
PLYMOUTH PL4 8AA

EDINBURGH

POSTGRADUATE DIPLOMA IN RECREATION AND LEISURE PRACTICE

This is a one year course designed to give practical experience of the broad field of recreation and leisure and to provide appropriate theoretical insights from the disciplines of the social sciences to equip candidates for administrative and managerial responsibilities.

The course will include a study of leisure provision, recreation management, experimental ventures in the arts, and the utilization and conservation of the environment. A term's placement in a sports complex, art centre, or a department of recreation and leisure will be an integral part of the course.

This postgraduate diploma will be of particular interest to individuals already working in national, regional, or local government or to teachers with special responsibility for recreation and leisure in schools.

Further particulars from the Assistant Principal, Dunfermline College of Physical Education, Cramond Road North, Edinburgh EH4 6JD.

Colleges of Further Education

CHESHIRE COUNTY COUNCIL

PADGATE COLLEGE OF HIGHER EDUCATION
Fearnhead, Warrington

Required for January until August 1976, a part-time LECTURER II in EUROPEAN LANGUAGES.

The post is mainly for German for Teacher's Certificate and B.Ed. degree courses. Ability to teach some French would be an advantage. Two days weekly will be required (Monday and Tuesday) [illegible] a native speaker of German who would conduct conversation groups, a third day (Wednesday) could be offered.

Application forms can be obtained from the Principal at the College, to whom they should be returned as soon as possible.

LONDON

ADDISON ADULT EDUCATION INSTITUTE
Addison Gardens, London, W.14
(Telephone number 603 [illegible])

Applications are invited for the post of LECTURER I for ADULT LITERACY and BASIC EDUCATION. Candidates should preferably have had recent experience of teaching [illegible]. The vacancy is from January 1, but [illegible] appointment may be made for a [illegible].

Salary scale £3,462 to £4,177 plus £[illegible] London allowance. Assistance may be given towards household removal expenses.

Details and application forms, returnable by December 5, 1975, may be obtained from [illegible] the Senior Administrative Officer at the Institute.

For Sale and Wanted

'ECONOMIC CRISIS!'

A stimulating and realistic economics simulation game. Ideal for teaching economics, business, sociology, or for amusement at home. For 6-80 players, teenagers or adults. Price £4.40 including postage and packing.
Cash with order to: Simulation Games, Department THE, 13 Kenilworth Avenue, Manchester M20 8NA

Colleges and Institutes of Technology

LOTHIAN REGIONAL COUNCIL

NAPIER COLLEGE OF COMMERCE AND TECHNOLOGY

LECTURER A in ECONOMICS (Ref. 315/4/75)

Required in the Department of Industrial and Social Studies. An interest in the economics of Public Policy or Industrial Economics would be advantageous. Applicants should possess an honours degree and/or equivalent professional qualifications and preferably have had industrial, research or teaching experience.

Salary in the range £3,316 [illegible] according to qualifications and experience.

Further particulars and application forms from the Assistant Principal, Napier College of Commerce and Technology, Colinton Road, Edinburgh [illegible], to whom they should be returned within 14 days of this advertisement [illegible].

Colleges of Education

THE SELLY OAK COLLEGES

BIRMINGHAM

TUTOR FOR COLLEGE

The College of the Ascension is an Anglican foundation containing missionary candidates and a range of personnel from churches over the world, including Europe as well as the Third World. It is the training college of the United Society for the Propagation of the Gospel.

Early in 1976, there will be a vacancy in the academic staff. The person appointed could be either ordained or lay, married or single. Applications from overseas nationals will be welcome, and for British applicants overseas experience is an advantage.

The person appointed would take part in a programme of adult education on the general theme of Mission, and the expertise offered by an applicant would be set against the needs of the group of colleges.

There is a particular commitment to the College of the Ascension, pastoral, tutorial and [illegible] academic and administrative in some extent. It is a residential post and [illegible] are provided. The salary is on [illegible] staff scale with [illegible] for residential [illegible].

Please apply, with full curriculum vitae and names and addresses of three referees, to the Administrative and Training [illegible] Selly Oak Colleges, [illegible].

Administration

NACRO

CAMBRIDGE EDUCATION UNIT

RESEARCH OFFICER

Grant £3,500 per annum

The Unit, established in May 1971, specialises in helping ex-offenders to rehabilitate themselves through education. Some of its students are resident in Cambridge, others are placed at colleges and universities elsewhere.

The above post, for which applications are now invited, is for three years, starting on 1st January, 1976, or as soon as possible thereafter. The work will involve monitoring the educational, emotional and social development of the students and assessing the viability of the Unit. It is also expected that some teaching or tutorial supervision would be undertaken during the first two years.

A first degree in the social sciences is desirable. The person appointed will have the opportunity to register for a higher degree at the University of Cambridge.

Applications in the form of a curriculum vitae and including the names and addresses of two referees should be sent to the Education Officer, NACRO Education, 1 Elizabeth Way, Cambridge, CB4 1DR (0223 [illegible]), from whom further particulars can be obtained. Closing date for applications [illegible].

CLEA proposals 'will not cut inefficiency'

from page 4

educational emphasis between universities on the one hand and polytechnics and colleges on the other is, in degree level education, both sectors draw on much the same school leavers and they send their graduates into the same society, competing for the same range of employment opportunities.

It cannot therefore be rational to attempt to organise the provision of higher education in the further education sector without taking account of, and without influencing, the provision of education at the same level made by the universities.

In the public sector of higher and further education there is however a complication. Further education extends over a very wide range. At one end of the range there is lower level craft work of school level. Within the general principles of national policy, this is entirely a local provision, needed by many members of the community in all areas.

At the other end of the range there is advanced further education, including a substantial proportion of postgraduate work. This cannot be provided for a large percentage of young people, and it cannot be provided everywhere. Its provision takes on a national character, and is inescapably locked into consideration of the total provision.

The current argument over the apportionment of the estimated 640,000 students in higher education in 1981 as between universities and the public sector demonstrates this point. It is a national argument, not a local one; but the number of people in non-advanced further education is very much a local, not a national, consideration.

Yet there is one system attempting to encompass the administration and control of these very different educational provisions, with their very different needs. It is too much to ask of one system. Being designed for the oversight of local education needs, it is inadequate and out of its depth when called upon to cope with a national provision.

In particular, polytechnics, which are institutions deal with a comprehensive range of advanced further education, will continue to experience obstacles to good economic operation if their planning is dealt with through the same machinery as that for large numbers of institutions carrying out lower level work.

This is not to suggest that advanced further education, and polytechnics in particular, should have no local connexions. On the contrary there is a strong wish for the involvement of local authorities, not to make the minor decisions which are left after the national and regional planning ones have been made, but as described in *Many Arts, Many Skills*, "to bring an awareness of the cultural, social and economic needs of the community; to encourage opportunities for the more mature members of the community seeking that second chance opportunity to develop educationally; to build relationships with industries and with the professions; to support the provisions of education for part-time students and professional people; to build relationships with other colleges; to support the development of a flourishing cultural life within the polytechnics".

Polytechnic directors want to see national and regional decisions made on a reasoned basis which demonstrates due attention to the need for prudent competent management of public expenditure, and they want a local relationship which is positive and creative rather than negative and restrictive.

The CLEA Proposals

The CDP does not believe that the CLEA proposals will provide a satisfactory solution to the problem of the management of advanced further education, for the following reasons:

● The regional machinery outlined in the CLEA proposals would perpetuate the present ineffective system, making only a limited concession to the need for proper management, and this on a regional basis only. The proposals appear to ignore completely the need for a sound management structure to implement policy on higher education.

● The proposals intend that the machinery shall deal with "the coordination and provision of non-university advanced and non-advanced FE" (fuction [c]). We believe that in the long term it is unrealistic to plan higher education for one sector (advanced further education) without some coordination with the similar and sometimes overlapping provision made in the other (the universities).

If there is a sound basis for the provision of two types of higher education for the same age group of students in two different types of institution, then it must be possible, in principle, to allocate resources to the two types of institution in a way that is consistent with that basis.

● The functions (a) and (b) of the CLEA document are concerned with a total number of teacher education places of about 50,000. Function (c) which includes advanced and non-advanced further education will grow to something like 350,000 places. Yet the CLEA proposals start from a consideration of functions (a) and (b), pointing out the requirements of regional machinery in this case, and then allow the consideration of this small teacher education part of the sector to dominate the proposals for machinery for advanced further education which is overwhelmingly the major part of the sector.

Surely the problem of the planning and coordination of higher education, with all its complications, university provision on the one hand, and the mixture of non-advanced and advanced further education in some institutions on the other, merits deeper consideration than it receives in the CLEA document. The CDP believes that teacher education must be planned and coordinated by the same machinery as higher education, but it is essential that the machinery be designed with the requirements of all higher education in mind.

● The CLEA proposals assume, without any attempt at justification, that advanced and non-advanced further education must be dealt with by the same machinery. The CDP has consistently drawn attention to the problems which arise from attempting to deal with higher education in the same system as non-advanced further education, problems which arise from the need for national planning of higher education in contrast to the highly local factors which determine the provision of non-advanced further education. We believe there can be no prospect of organizing higher education economically if these problems are ignored.

The DES Request for Specific Comments

In the light of what we consider to be the inadequacy of the proposals to meet the real problem of managing the provision of higher education, it is difficult for the CDP to make useful detailed comments along the lines suggested. We attempt to do so out of a desire to approach any proposals in as constructive a manner as possible.

(a) Whether the interim regional committees, as proposed by ACSTT, should be established at an early date and attached for administrative purposes to the existing Regional Advisory Councils, or whether further action to establish them should await the creation of wider machinery on the lines proposed in the memorandum.

We find it difficult to answer question (a) in the terms of the alternatives proposed. We do not accept that the interim regional committees proposed by ACSTT should be established, nor do we think that further action should await the creation of wider machinery on the lines proposed in the CLEA memorandum. We think that further action should await the creation of a management structure which satisfies the criteria outlined in our introduction.

(b) The relationship between the proposed Regional Council's governing body and the committees which (paragraph 13(c) of the memorandum) it would have a duty to establish: within such a concept, is the proposed choice of such committees right?

No comment at this stage.

(c) The terms of reference of the governing body and of the committees.

In connexion with any body, regional or otherwise, that is proposed as part of a regional machinery, we should expect the terms of reference to provide for a separate consideration of, and separate provision for, advanced further education, recognizing its national and regional as opposed to local characteristics.

(d) The membership pattern of the governing body and of the committees.

On the general question of membership of committees, we feel that some lessons ought to be learned from the contrast between the confidence which universities place in UGC and the lack of confidence which local authority colleges place in the RACs.

We feel that committees of this nature will only draw respect and confidence if they are small enough to be competent, if their members are chosen for known ability, and if they are not designed on the basis of having so many representatives from every interested organization.

(e) The relationship between the committees, particularly those concerned with teacher education.

No comment at present.

(f) Whether the councils should have any role in relation to the financial control of the institutions within their purview.

Since we do not believe that the councils, as proposed, form a satisfactory basis for solving the problems of higher education, we cannot see them having a role in financial control. However, it is clear that there would have to be a consideration of the way in which financial control could be arranged that would be appropriate to the needs of the very different kinds of work which are covered in the further education sector.

We recognize the problems which arise. We believe that a solution can and must be found which provides for the local financial control of local work and for the national financial control of work whose character demands that it should be planned and coordinated on a national basis.

(g) What particular features would need to be included in the Trust Deed or other Instrument establishing the councils.

(h) the appropriate involvement of central government whether with or without the 50 per cent financing suggested.

(g) and (h) are questions which relate specifically to the proposals as outlined and our comment would not be appropriate.

(i) What relationship the councils might have with the universities in their regions to improve coordination and cooperation across the whole of higher education.

We do not believe that a satisfactory approach can be made to the problems of higher education by setting up councils to deal with one part of the higher education field and then to ask what relationships will improve coordination. The apportionment of available resources between the different types of higher education must be made by government in a manner which is consistent with their declared educational policy, and cannot be left to peripheral attempts to coordinate two sectors whose independence has been artificially created.

(j) Whether the creation of the councils would call for the creation of any counterpart body at national level, and if so what should be its nature and role.

The necessity for asking the question (j) underlines the inadequacy of the CLEA proposal. The CLEA document itself simply refers as an afterthought to the fact that "regional bodies usually sooner or later find the need for some kind of small national body".

We consider that this statement more than any other in the paper demonstrates failure to understand the need for good management and organization in higher education which is now a major and expensive enterprise with a determining influence on national well-being, and on the lives and careers of one-fifth of the population.

The essential step in developing that good management and organization is the establishment of a national body, not along the lines proposed in the CLEA document, but as a starting point. This should be the point at which the policies are thrashed out, the requirements of the different types of education determined and the allocation of resources made. The consideration of the details and the functions of the regional structure must follow the consideration of the nature and role of the national body.

The Committee of Directors of Polytechnics now seeks the opportunity to work with others involved in the organization of higher education towards the design of a competent management system equal to the considerable tasks indicated in this paper.

Comments on the CLEA proposals for regional machinery in England beyond the school level, a reply by the Committee of Directors of Polytechnics.

Courses continued

ASTON IN BIRMINGHAM

THE UNIVERSITY

DEPARTMENT OF EDUCATION

Head of Department: Professor Richard Whitfield

M.Sc. IN EDUCATIONAL STUDIES (1 year)

DIPLOMA IN COUNSELLING IN EDUCATIONAL SETTINGS (1 year)

M.Phil. and Ph.D. IN EDUCATIONAL RESEARCH (part-time and/or full-time)

Applications are invited from suitably qualified persons for the above courses; professional or other relevant experience valued.

Further details and forms available from: The Course Tutor (state course), Department of Education, University of Aston in Birmingham, Gosta Green, Birmingham B4 7ET. Tel. 021-359 3611, Ext. 6160 [illegible].

MIDDLESEX

BRUNEL UNIVERSITY
DEPARTMENT OF GOVERNMENT

M.A. IN PUBLIC AND SOCIAL ADMINISTRATION 1976/77

The Department of Government offers places and STUDENTSHIPS for the Master of Arts Degree in Public and Social Administration with options in Education, Health, Housing and Social Service Organisation.

The course is offered both as a one year full time course and a two year part time course (except in housing which is only offered as a full time course), involving attendance of one day a week.

Application forms from SAM, Department of Government, Brunel University, Uxbridge, Middlesex, enclosing a 6½p 9.5in x 6.5in stamped addressed envelope.

Closing date for applications, 31st December, 1975.

Librarians

PRESTON

THE POLYTECHNIC

ASSISTANT LIBRARIAN

Applications are invited for a post in Technical Services in the Polytechnic Library, to be based initially at the Chorley [illegible].

Salary Scale AP3, £2,932 to £3,[illegible] p.a., superannuable.

Further details and application forms are available from the Deputy Chief Administrative Officer, Preston Polytechnic, Corporation Street, Preston PR1 2TQ, for return by 5th December, 1975.

Classified Advertisements

To advertise in the THES classified phone
01-837 1234, Extn 575.

The Times Higher Education Supplement
New Printing House Square,
P.O. Box 7,
Gray's Inn Road,
London WC1X 8EZ.

Overseas

MINISTRY OF EDUCATION

KUWAIT

APPLICATIONS ARE INVITED FOR POSTS OF TEACHERS AT THE COLLEGE OF COMMERCE IN KUWAIT

1. Seven teachers: To teach "OFFICE PRACTICE". Four men and three women.
   APPLICANTS SHOULD HAVE:
   a—Degree or a professional qualification.
   b—Practical experience in training students on Office Equipment, Practical and teaching experience is expected.
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The maximum salary per month for each post is:
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7—Contracts available for two years (renewable at three months' notice).

Personal data and curriculum vitae should be sent to Kuwait Embassy, Cultural Attaché's Office, Al-Jabra House, 3 Stratford Place, London, W1N 9AE. Tel: 01-629 6833.

General Vacancies

GLASGOW

THE UNIVERSITY

TELEVISION SERVICE

ASSISTANT PRODUCER

Applications are invited from graduates for the post of Assistant Producer in the University's closed-circuit Television Service. Salary will be on the Grade IB scale £2,434 to £4,290 per annum for Other Related Academic Staff, placement according to qualifications and experience. Appropriate Superannuation Scheme will apply.

Practical experience of educational television will be a particular advantage, and a general knowledge of other audio-visual teaching aids would be helpful.

Further particulars may be had from the Secretary of the University Court (Room 16), the University of Glasgow, Glasgow G12 8QQ, with whom applications (six copies) should be lodged not later than 12th December, 1975.

In reply please quote Reference Number 3747.

Announcements

"ACADEMICS invited to devise and conduct special interest holiday itineraries in Britain next year. Historians, archaeologists, architectural and art historians etc. offered generous terms. Box 0660 J, T.H.E.S., Printing House Square, Times, WC1X 8EZ.